



Environmental Data Service

KEY TO METEOROLOGICAL RECORDS DOCUMENTATION NO. 5.315

Catalog of Meteorological Satellite Data - ESSA 3 and ESSA 5 Television Cloud Photography

July 1 - September 30, 1967



PURPOSE

The Key to Meteorological Records Documentation Series has been established to provide guidance information to research personnel making use of climatological data.

Frequently users of such data have found it necessary to spend a great deal of time establishing whether the criteria for observing or computing various elements have changed over the period of record or in what form the data are available.

It is therefore hoped that the presentation of this series may not only conserve valuable time but may have a direct influence in improving the accuracy of research results.

EARLIER TIROS AND ESSA DATA CATALOGS

Earlier catalogs of TIROS and ESSA Meteorological Satellite data are available in this series, as follows:

- No. 5.31 "Catalogue of Meteorological Satellite Data - TIROS I Television Cloud Photography", published in 1961, price 70 cents.
- No. 5.32 "Catalogue of Meteorological Satellite Data - TIROS II Television Cloud Photography", published in 1963, price 20 cents.
- No. 5.33 "Catalogue of Meteorological Satellite Data - TIROS III Television Cloud Photography", published in 1962, price 70 cents.
- No. 5.34 "Catalogue of Meteorological Satellite Data - TIROS IV Television Cloud Photography", published in 1963, price \$1.00.
- No. 5.35 "Catalogue of Meteorological Satellite Data - TIROS V Television Cloud Photography", published in 1964, price \$1.75.
- No. 5.36 "Catalogue of Meteorological Satellite Data - TIROS VI Television Cloud Photography", published in 1964, price \$2.00.
- No. 5.37 "Catalogue of Meteorological Satellite Data - TIROS VII Television Cloud Photography Part 1 June 19, 1963 to December 31, 1963", published in 1965, price \$1.25.
- No. 5.37 "Catalogue of Meteorological Satellite Data - TIROS VII Television Cloud Photography Part 2 January 1, 1964 to June 30, 1964", published in 1965, price \$1.00.
- No. 5.37 "Catalogue of Meteorological Satellite Data - TIROS VII Television Cloud Photography Part 3 July 1, 1964 to December 30, 1964", published in 1965, price \$1.00.
- No. 5.37 "Catalogue of Meteorological Satellite Data - TIROS VII Television Cloud Photography Part 4 January 1, 1965 to December 31, 1965", published in 1966, price 45 cents.
- No. 5.38 "Catalogue of Meteorological Satellite Data - TIROS VIII Television Cloud Photography Part 1 December 21, 1963 to June 30, 1964", published in 1965, price \$1.00.
- No. 5.38 "Catalogue of Meteorological Satellite Data - TIROS VIII Television Cloud Photography Part 2 July 1, 1964 to December 31, 1964", published in 1965, price \$1.00.

(Continued on inside back cover)



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KEY TO METEOROLOGICAL RECORDS DOCUMENTATION NO. 5.315

**Catalog of Meteorological Satellite Data -
ESSA 3 and ESSA 5
Television Cloud Photography**

July 1 - September 30, 1967

WASHINGTON, D.C.
1968

PREFACE

This issue in the series of catalogs describing the television cloud photographs obtained by meteorological satellites includes material taken from both ESSA 3 and ESSA 5. It covers the period of July 1, 1967 through September 30, 1967. The maps and listings generally follow the pattern established in the "Catalogue of Meteorological Satellite Data - TIROS I Television Cloud Photography," published as No. 5.31 in the Environmental Data Service Series Key to Meteorological Records Documentation. However, digitized cloud maps replace the manually constructed nephanalyses which had been used in previous catalogs. There are two maps for each day; the first polar stereographic projection in each set is for the Northern Hemisphere and the second for the Southern Hemisphere. These maps are arranged according to pass day.

Documentation Section
National Environmental Satellite Center

USING THE CATALOG

1. Scan the digitized cloud maps for areas of particular interest.
2. When a picture of interest is located, the film can be ordered by date from the National Weather Records Center, Asheville, N. C., at a cost of \$8.50 per day.
3. Information for a particular pass, such as start time, subsatellite point (the point where the local vertical through the satellite intersects the earth's surface), and track number, may be determined by using the tabulated listings preceding the digitized cloud maps.

CATALOG OF METEOROLOGICAL SATELLITE DATA -
ESSA 3 and ESSA 5 TELEVISION CLOUD PHOTOGRAPHY

July 1, 1967, through September 30, 1967

The ESSA 3 meteorological satellite, launched on October 2, 1966 by the National Aeronautics and Space Administration, is the third Environmental Survey Satellite in the TIROS Operational (TOS) System. ESSA 3 was put into a nearly circular, sun-synchronous polar orbit, approximately 892 statute miles above the earth's surface with an apogee of 925 statute miles and a perigee of 859 statute miles. The orbit is inclined 79° (Retrograde) to the equatorial plane with a nodal period of 114.5 minutes which corresponds to slightly less than 13 circuits of the earth each day.

ESSA 3 is a TIROS type satellite in a "cartwheel" configuration which allows earth-oriented picture coverage. The spacecraft is spin-stabilized and magnetically torqued to a wheel attitude, so that the spin axis is normal to the plane of the orbit and the radially mounted cameras view the earth once during each spacecraft revolution about its axis.

The cameras in the ESSA 3 satellite are one inch diameter vidicons (television camera tube) of the Advanced Vidicon Camera System (AVCS) type. Each picture covers an area of approximately 4,000,000 square miles. One camera provides full global coverage, therefore, two cameras provide full system redundancy.

Each of the cameras can independently take pictures and store them for later playback to one of the Command-and-Data-Acquisition (CDA) stations which are located at Wallops Station near Chincoteague, Va., and Gilmore Creek, Fairbanks, Alaska.

Pictures, taken every 260 seconds, are usually obtained in sequence of twelve frames to a pass. Each frame is electronically gridded by computer with latitude and longitude lines and geographic outlines merged with the picture. An identification legend underneath each picture provides the following information: year, month, day, hour, minute and second of picture taking time; track and zone numbers; station initial; satellite number; mode; camera; latitude of a labeled grid intersection near the picture center; latitude spacing of grids in degrees; longitude of a labeled grid intersection near the picture center; longitude spacing of grids in degrees; pass number; frame number; and sun glint position. The picture, figure 1, is located in the area of track 3 (TABLE 1) zone 58 (not referenced), with the latitude and longitude point of the picture located at 40°N and 105°W . The grids are spaced 5° both in latitude and longitude and sun glint is shown in the picture at 21°N and 86°W .

For ESSA 3 the system of "TRACKS" is used to identify the general geographic areas over which picture sequences were taken. These tracks are listed in the ESSA 3 track table (TABLE 1) which appears in this catalog immediately following the tabulated listings. The track boundaries are parallel to the path followed by the subsatellite point during the daylight portion of each orbital pass. The width of each track is exactly equal to the amount the earth rotates between consecutive passes. Thus, in general, the subsatellite point makes one traverse along each track each day (from midnight to midnight, GMT). The track boundaries are fixed permanently for the life of ESSA 3, and are arbitrarily referenced to the point 0° latitude, 0° longitude, with track numbers increasing westward.

Since the ESSA 3 orbital period of 114.5 minutes is not an exact submultiple of 24 hours, the satellite starts 12 and 13 passes on alternate days. This results in track 13 being much narrower than the others and, thus, it is not traversed every day. There are also days on which one particular track is traversed just after GMT midnight, and again later the same day just before GMT midnight.

The ESSA 5 meteorological satellite, launched on April 20, 1967, has characteristic features similar to ESSA 3. When pictures from ESSA 5 more nearly fit the operational requirements for data they are combined with pictures from ESSA 3 in the digitized cloud maps.

ESSA 5, like ESSA 3, was put into a nearly circular polar orbit, approximately 892 statute miles above the earth's surface, with an apogee of 922 statute miles and a perigee

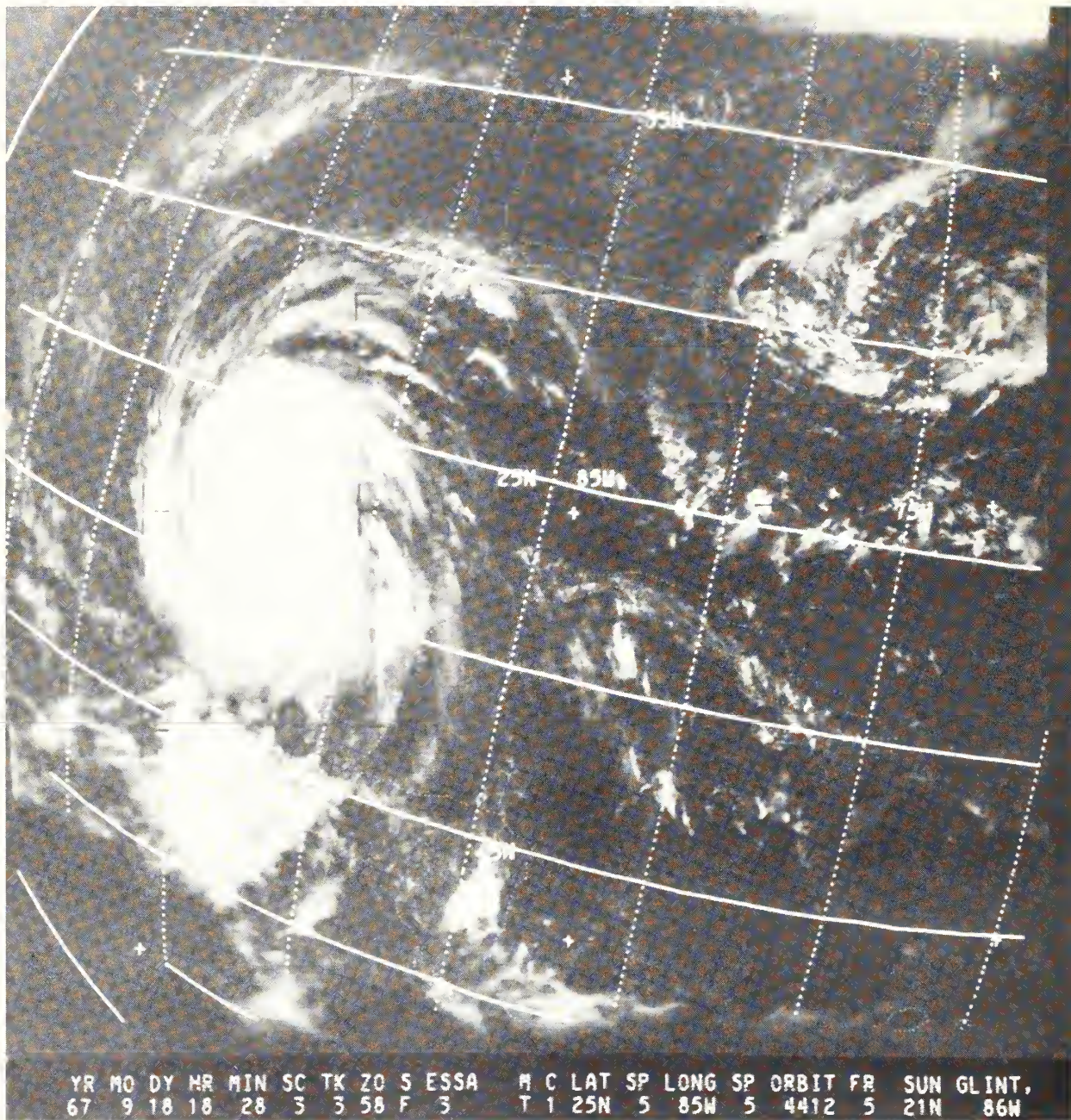


Figure 1 - Example of ESSA 3 Cloud Photography

ESSA 5 similar

of 861 statute miles. The orbit inclines 78.42° to the equatorial plane with an orbital period of 113.6 minutes which corresponds to 12.7 passes around the earth each day.

The cameras in the ESSA 5 satellite are of the same design as those in the ESSA 3 satellite. Picture coverage of the entire sunlit area of the earth is possible each day. Each camera can independently take pictures and store them on tape for later playback to a CDA station in the same manner as ESSA 3 photos.

Pictures, taken at 260 seconds, are in sequences of 6 or 12 frames to a pass, each frame being electronically gridded to show latitude, longitude and geographic outlines on the picture. The grids are generally spaced at 5° intervals of latitude and longitude. The identification legend underneath each picture supplies all pertinent information.

The "track" system of ESSA 5 is similar to that of ESSA 3 and track boundaries are fixed for the life of the satellite. They are used to identify the geographic areas over which picture sequences were taken. These tracks are listed in the ESSA 5 track table (TABLE 2) which immediately follows the ESSA 3 track table (TABLE 1).

Since the ESSA 5 orbital period of 113.6 minutes is not an exact multiple of 24 hours, the satellite starts 12 and 13 passes on alternate days. This results in track 13 being much narrower than the others and, thus, is not traversed every day. There also are days on which one particular track is traversed just after GMT midnight, and again later the same day just before GMT midnight.

On the film reels, picture sequences are grouped together by track number and assembled in chronological order. Track numbers are stamped on the film immediately preceding the sequence to which they apply.

The following pages of tabulated listings give descriptive information about the pictures obtained by ESSA 3 and ESSA 5. In the listings each picture sequence is described by one line, and the sequences are grouped together by date and track number. This is the order in which they appear on the film reel. The column headings and entries have the following meanings:

PASS: Orbital pass number on which the pictures were taken.
On the digitized cloud maps in this catalog, these numbers appear beneath the date in the lower right corner of the page.

TRACK: Defines the geographic area which contains the path of the subsatellite point. The entries refer to TABLES 1 and 2.

C: Camera number indicated in the legend.

1 = Camera number one

2 = Camera number two

S: Command-and-Data-Acquisition (CDA) station which received the sequence.

W = Wallops Station, Va.

F = Fairbanks, Alaska

ALONG: Longitude of ascending node (equator crossing)

MODA: Month and day on which the pictures were taken.

HRMNSE: Time in hours, minutes and seconds of the first picture taken.

SUBSATELLITE POINT PICTURE LOCATION: Indicates the latitude in degrees of the subsatellite point for each of the twelve frames in the orbital pass sequence. First latitude column corresponds to picture frame No. 12

The digitized cloud maps that appear in this catalog are prepared by a high speed digital computer. In this process the signals comprising the picture taken by the satellite are assigned numerical values to indicate the relative brightness of each element. These data are normalized brightness, earth-located and repositioned on standard map projection. Magnetic tapes are reproduced for input to a cathode ray tube film display device. These digitized cloud maps are constructed so that the overlap of day, 24 hours apart, is positioned in an area between 80 and 60 degrees East. On some days, the first pass of the mosaic day is the same as the last pass of the previous day to keep the 24 hour break in the required area. A detailed description of the procedures used to produce these digitized cloud maps is contained in reference 1; a condensed and edited version of this same article appears in reference 2. The photographic product, resulting from this computer processing, consists of 16 images; eight polar stereographic octants, 6 Mercator segments and two reduced polar hemispheric chips for each day. The digitized cloud maps are the reduced resolution northern and southern polar hemispheric chips in which latitude and longitude lines are spaced at 10° intervals. In some instances, blank areas and mislocated clouds appear on the digitized cloud maps which are irregularities of the computer operation and should be disregarded. The date appears in the lower right corner of the page along with inclusive pass numbers for the day.

The ESSA 3 and ESSA 5 master films are deposited at the National Weather Records Center (NWRC), Environmental Science Services Administration, Federal Building, Asheville, North Carolina 28801. Persons or institutions desiring copies may order them from the NWRC in the form of 35 mm. positive transparencies for projection or 35 mm. duplication negatives from which opaque copies can be made. Pictures are ordered by date at a cost of \$8.50 per day which includes the digitized computer maps for each day ordered (16 film chips per day). These digitized computer maps are also available separately on 100 foot reels, at \$8.50 per reel, with each reel containing approximately 22 days of the film chips. All copies will be furnished with sprocket holes since the necessary film emulsion is available only in this form. It is not yet possible to furnish copies of individual frames or to provide enlargements or other picture formats.

Available also from the NWRC, for the cost of reproduction, are reels of microfilmed nephanalysis charts for TIROS I thru ESSA 1.

REFERENCES

1. Bristol, C. L., Callicott, W. M., and Bradford, R. E.: "Operational Processing of Satellite Cloud Pictures by Computer," Monthly Weather Review, 94(8), August 1966, pp. 515-527.
2. U. S. Department of Commerce, Environmental Science Services Administration, Environmental Data Service, "Catalog of Meteorological Satellite Data - ESSA 3 Television Cloud Photography, Part 2, January 1, 1967 to March 31, 1967," KMRD No. 5.313, Washington, D. C., 1967.

PASS	TRACK	C	S	ALON	MOOA	HRMNSE	SUB-SATELLITE POINT PICTURE LOCATION											
							LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT
907	6	2	F	156W	0701	013020	54S	41S	27S	14S	1S	12N	25N	38N	51N			
908	7	2	W	175E	0701	032358	54S	41S	27S	14S	1S	12N	25N	39N	52N	64N	75N 77N	
909	8	2	W	147E	0701	051738	53S	40S	27S	14S	ON	12N	26N	39N	52N	64N	75N 77N	
910	9	2	W	118E	0701	071121	53S	40S	27S	13S	ON	13N	26N	39N	52N	65N	75N	
911	10	2	W	90E	0701	090507	53S	39S	26S	13S	ON	13N	26N	40N	53N	65N	75N	
912	11	2	F	62E	0701	105855	52S	39S	26S	12S	ON	14N	27N	40N	53N	66N	76N	
913	12	2	F	33E	0701	125245	51S	38S	25S	11S	1N	14N	28N	41N	54N	66N	76N	
914	13	2	F	5E	0701	144619	51S	38S	25S	12S	1N	14N	27N	41N	54N	66N	76N	
915	1	2	F	24W	0701	163942	52S	39S	26S	12S	ON	13N	27N	40N	53N	65N	75N	
916	2	2	F	52W	0701	183307	52S	39S	26S	13S	ON	13N	26N	40N	52N	65N	75N	
917	3	2	F	80W	0701	202635	53S	40S	27S	13S	ON	13N	26N	39N	52N	65N		
918	4	2	F	109W	0701	222005	53S	40S	27S	14S	ON	12N	26N	39N	52N	64N		
919	5	2	F	137W	0702	001337	53S	40S	27S	14S	ON	12N	25N	39N	52N			
920	6	2	F	166W	0702	020712	53S	40S	27S	14S	ON	12N	25N	39N	52N			
921	7	2	W	166E	0702	040049	53S	40S	27S	14S	ON	12N	26N	39N	52N	64N	75N 77N	
922	8	2	W	138E	0702	055429	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N	75N 77N	
923	9	2	W	109E	0702	074811	53S	40S	26S	13S	ON	13N	26N	39N	52N	65N	75N	
924	10	2	W	81E	0702	094156	52S	39S	26S	13S	ON	13N	27N	40N	53N	65N	75N	
925	11	2	F	52E	0702	113543	52S	39S	25S	12S	ON	14N	27N	40N	54N	66N	76N	
926	12	2	F	24E	0702	132916	52S	39S	26S	12S	ON	13N	27N	40N	53N	65N	75N	
927	1	2	F	4W	0702	152239	53S	40S	26S	13S	ON	13N	26N	39N	52N	65N	75N	
928	2	2	F	33W	0702	171604	53S	40S	27S	13S	ON	12N	26N	39N	52N	64N	75N	
929	3	2	F	61W	0702	190932	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N	75N	
930	4	2	F	89W	0702	210302	54S	41S	28S	14S	1S	12N	25N	38N	51N	64N		
931	5	2	F	118W	0702	225635	54S	41S	28S	14S	1S	12N	25N	38N	51N	64N		
932	6	2	F	146W	0703	005013	54S	41S	28S	14S	1S	12N	25N	38N	51N			
933	7	2	W	175W	0703	024351	54S	41S	27S	14S	1S	12N	25N	38N	51N	64N	75N 77N	
934	8	2	W	157E	0703	043732	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N	75N 77N	
935	9	2	W	129E	0703	063115	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N	75N	
936	10	2	W	100E	0703	082500	53S	40S	26S	13S	ON	13N	26N	40N	53N	65N	75N	
937	11	2	W	72E	0703	101848	52S	39S	26S	12S	ON	14N	27N	40N	53N	66N	76N	
938	12	2	F	43E	0703	121239	51S	38S	25S	11S	1N	14N	28N	41N	54N	66N	76N	
939	13	2	F	15E	0703	140613	51S	38S	25S	12S	1N	14N	27N	41N	54N	66N	76N	
940	1	2	F	13W	0703	155936	52S	39S	26S	12S	ON	13N	27N	40N	53N	65N	75N	
941	2	2	F	42W	0703	175301	53S	39S	26S	13S	ON	13N	26N	39N	52N	65N	75N	
942	3	2	F	70W	0703	194628	53S	40S	27S	14S	ON	12N	26N	39N	52N	64N		
943	4	2	F	99W	0703	213959	53S	40S	27S	14S	ON	12N	26N	39N	52N	64N		
944	5	2	F	127W	0703	233331	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N		
945	6	2	F	154W	0704	012706	54S	41S	28S	14S	1N	13N	26N	38N	52N			
946	7	2	W	176E	0704	032044	53S	40S	27S	14S	ON	12N	26N	39N	52N	64N	75N 77N	
947	8	2	W	148E	0704	051424	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N	75N 77N	
948	9	2	W	119E	0704	070806	53S	40S	26S	13S	ON	13N	26N	39N	52N	65N	75N	
949	10	2	W	91E	0704	090151	52S	39S	26S	13S	ON	13N	27N	40N	53N	65N	75N	
950	11	2	F	63E	0704	105539	52S	39S	25S	12S	ON	14N	27N	41N	54N	66N	76N 76N	
951	12	2	F	34E	0704	124929	51S	38S	25S	11S	1N	15N	28N	41N	54N	67N	76N 76N	
952	13	2	F	6E	0704	144303	51S	38S	25S	11S	1N	14N	28N	41N	54N	66N	76N	
953	1	2	F	23W	0704	163626	52S	39S	25S	12S	ON	14N	27N	40N	53N	66N	76N	
954	2	2	F	51W	0704	182951	52S	39S	26S	13S	ON	13N	26N	40N	53N	65N	75N	
955	3	2	F	79W	0704	202318	53S	40S	26S	13S	ON	13N	26N	39N	52N	65N		
956	4	2	F	108W	0704	221649	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N		
957	5	2	F	136W	0705	001022	53S	40S	27S	13S	ON	12N	26N	39N	52N			
958	6	1	F	165W	0705	020357	54S	41S	28S	14S	1N	13N	26N	39N	52N			
959	7	2	W	167E	0705	035754	54S	41S	28S	14S	1N	13N	27N	39N	53N	65N	75N 77N	
960	8	2	W	138E	0705	050515	53S	41S	28S	13S	1N	12N	27N	40N	53N	65N	76N	
961	9	2	W	110E	0705	074457	53S	40S	27S	13S	ON	13N	27N	40N	53N	66N	76N	
962	10	2	W	82E	0705	093842	52S	39S	26S	12S	ON	14N	27N	40N	53N	66N	76N	
963	11	2	F	53E	0705	113230	51S	38S	25S	12S	1N	14N	28N	41N	54N	66N	76	
964	12	2	F	25E	0705	132620	51S	38S	24S	11S	2N	15N	28N	42N	55N	67N	76N	
965	1	2	F	3W	0705	151954	51S	38S	25S	11S	1N	15N	28N	41N	54N	66N	76N	
966	2	2	F	32W	0705	171317	51S	38S	25S	12S	1N	14N	27N	40N	53N	66N	76N	
967	3	2	F	60W	0705	190642	52S	39S	26S	12S	ON	13N	27N	40N	53N	65N	75N	
968	4	2	F	89W	0705	210010	52S	39S	26S	13S	ON	13N	26N	40N	53N	65N		
969	5	2	F	117W	0705	225340	53S	40S	26S	13S	ON	13N	26N	39N	52N	65N		
970	6	2	F	145W	0706	004710	53S	40S	27S	13S	ON	12N	26N	39N	52N			
971	7	2	W	174W	0706	024044	53S	40S	27S	13S	ON	12N	26N	39N	52N	64N	75N 77N	
972	8	2	W	158E	0706	043421	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N	75N 77N	
973	9	2	W	130E	0706	062800	53S	40S	27S	13S	ON	13N	26N	39N	52N	65N	75N	
974	10	2	W	101E	0706	082142	53S	39S	26S	13S	ON	13N	26N	40N	53N	65N	75N	
975	11	2	W	73E	0706	101527	52S	39S	26S	12S	ON	14N	27N	40N	53N	66N	76N	
976	12	2	F	44E	0706	120913	52S	38S	25S	12S	1N	14N	27N	41N	54N	66N	76N	
977	13	2	F	16E	0706	140247	52S	39S	25S	12S	ON	14N	27N	40N	53N	66N	76N	
978	1	2	F	12W	0706	155609	52S	39S	26S	13S	ON	13N	26N	40N	53N	65N	75N	
979	2	2	F	41W	0706	174935	53S	40S	27S	13S	ON	13N	26N	39N	52N	65N	75N	
980	3	2	F	69W	0706	194302	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N		
981	4	2	F	98W	0706	213632	54S	41S	27S	14S	1S	12N	25N	38N	51N	64N		

PASS	TRACK	C	S	ALON	MODA	HRMNSL	SUD-SATELLITE POINT PICTURE LOCATION													
							LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT
982	5	2	F	126W	0706	233005	54S	41S	27S	14S	1S	12N	25N	38N	51N	64N				
983	6	2	F	154W	0707	012340	54S	41S	27S	14S	2N	13N	25N	38N	52N					
984	7	2	W	177E	0707	031718	54S	41S	27S	14S	1S	12N	25N	38N	52N	64N	75N	77N		
985	8	2	W	149E	0707	051058	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N	75N	77N		
986	9	2	W	120E	0707	070441	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N	75N			
987	10	2	W	92E	0707	085826	53S	40S	26S	13S	ON	13N	26N	40N	53N	65N	75N			
988	11	2	F	64E	0707	105214	52S	39S	26S	12S	ON	14N	27N	40N	53N	66N	76N			
989	12	2	F	35E	0707	124604	51S	38S	25S	11S	1N	14N	28N	41N	54N	66N	76N			
990	13	2	F	7E	0707	143939	51S	38S	25S	12S	1N	14N	27N	41N	54N	66N	76N			
991	1	2	F	22W	0707	163301	52S	39S	26S	12S	ON	13N	27N	40N	53N	65N	75N			
992	2	2	F	50W	0707	182626	53S	40S	26S	13S	ON	13N	26N	39N	52N	65N	75N			
993	3	2	F	78W	0707	201953	53S	40S	27S	13S	ON	12N	26N	39N	52N	64N				
994	4	2	F	107W	0707	221323	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N				
995	5	2	F	135W	0708	000657	53S	40S	27S	14S	ON	12N	25N	39N	52N					
996	6	2	F	164W	0708	020033	53S	40S	27S	14S	ON	12N	25N	39N	52N					
997	7	2	W	168E	0708	035410	53S	40S	27S	14S	ON	12N	26N	39N	52N	64N	75N	77N		
998	8	2	W	140E	0708	054750	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N	75N	77N		
999	9	2	W	111E	0708	074133	53S	40S	26S	13S	ON	13N	26N	39N	52N	65N	75N			
1000	10	2	W	83E	0708	093518	52S	39S	26S	13S	ON	13N	27N	40N	53N	65N	76N			
1001	11	2	F	54E	0708	112906	52S	39S	25S	12S	1N	14N	27N	41N	54N	66N	76N			
1002	12	2	F	26E	0708	132256	51S	38S	25S	11S	1N	15N	28N	41N	54N	67N	76N			
1003	1	2	F	2W	0708	151630	51S	38S	25S	11S	1N	14N	28N	41N	54N	66N	76N			
1004	2	2	F	31W	0708	170953	52S	39S	25S	12S	ON	14N	27N	40N	53N	66N	76N			
1005	3	2	F	59W	0708	190318	52S	39S	26S	13S	ON	13N	27N	40N	53N	65N	75N			
1006	4	2	F	88W	0708	205645	53S	40S	26S	13S	ON	13N	26N	39N	52N	65N				
1007	5	2	F	116W	0708	225016	53S	40S	27S	13S	ON	13N	26N	39N	52N	65N				
1008	6	2	F	144W	0709	004347	53S	40S	27S	13S	ON	12N	26N	39N	52N					
1009	7	2	W	173W	0709	023722	53S	40S	27S	14S	1S	13N	27N	39N	53N	64N	75N	77N		
1010	8	2	W	158E	0709	043059	54S	41S	28S	14S	1S	13N	26N	39N	53N	64N	75N	77N		
1011	9	2	W	131E	0706	062939	53S	41S	28S	14S	1N	13N	27N	39N	53N	65N	76N			
1012	10	2	W	102E	0709	081821	53S	40S	26S	13S	ON	13N	26N	40N	53N	65N	75N			
1013	11	2	W	74E	0709	101206	52S	39S	26S	12S	ON	13N	27N	40N	53N	66N	76N			
1014	12	2	F	45E	0709	120554	51S	38S	25S	12S	1N	14N	27N	41N	54N	66N	76N			
1015	13	2	F	17E	0709	135927	52S	39S	25S	12S	ON	14N	27N	40N	53N	66N	76N			
1016	1	2	F	12W	0709	155249	52S	39S	26S	13S	ON	13N	26N	40N	53N	65N	75N			
1017	2	2	F	40W	0709	174615	53S	40S	27S	13S	ON	13N	26N	39N	52N	65N	75N			
1018	3	2	F	68W	0709	193942	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N				
1019	4	2	F	97W	0709	213312	54S	41S	27S	14S	1S	12N	25N	38N	51N	64N				
1020	5	2	F	125W	0709	232645	54S	41S	27S	14S	1S	12N	25N	38N	51N	64N				
1021	6	2	F	153W	0710	012020	54S	41S	27S	14S	1S	12N	25N	38N	51N					
1022	7	2	W	178E	0710	031358	54S	41S	27S	14S	1S	12N	25N	38N	51N	64N	75N	77N		
1023	8	2	W	150E	0710	050738	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N	75N	77N		
1024	9	2	W	121E	0710	070121	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N	75N			
1025	10	2	W	93E	0710	085506	53S	40S	26S	13S	ON	13N	26N	40N	53N	65N	75N			
1026	11	2	F	65E	0710	104853	52S	39S	26S	12S	ON	14N	27N	40N	53N	66N	76N			
1027	12	2	F	36E	0710	124243	51S	38S	25S	12S	1N	14N	28N	41N	54N	66N	76N			
1028	13	2	F	8E	0710	143617	51S	38S	25S	12S	1N	14N	27N	40N	53N	66N	76N			
1029	1	2	F	21W	0709	162940	52S	39S	26S	12S	ON	13N	27N	40N	53N	65N	75N			
1030	2	2	F	49W	0710	182305	53S	40S	26S	13S	ON	13N	26N	39N	52N	65N	75N			
1031	3	2	F	77W	0710	201633	53S	40S	27S	13S	ON	12N	26N	39N	52N	64N				
1032	4	2	F	107W	0710	221003	54S	41S	28S	14S	1S	13N	26N	39N	52N	64N				
1033	5	2	F	134W	0711	000339	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N				
1034	6	2	F	163W	0711	015715	53S	40S	27S	14S	ON	12N	26N	39N	52N					
1035	7	2	W	169E	0711	035053	53S	40S	27S	14S	ON	12N	26N	39N	52N	64N	75N	77N		
1036	8	2	W	141E	0711	054433	53S	40S	27S	13S	ON	13N	26N	39N	52N	65N	75N	76N		
1037	9	2	W	112E	0711	073816	53S	40S	26S	13S	ON	13N	26N	40N	53N	65N	75N			
1038	10	2	W	84E	0711	093202	52S	39S	26S	12S	ON	13N	27N	40N	53N	66N	76N			
1039	11	2	F	55E	0711	112550	51S	38S	25S	12S	1N	14N	28N	41N	54N	66N	76N			
1040	12	2	F	27E	0711	131941	51S	38S	24S	11S	2N	15N	28N	42N	55N	67N	76N			
1041	1	2	F	1W	0711	151315	51S	38S	25S	11S	1N	15N	28N	41N	54N	66N	76N			
1042	2	2	F	30W	0711	170636	52S	38S	25S	12S	ON	14N	27N	40N	53N	66N	76N			
1043	3	2	F	58W	0711	190000	52S	39S	26S	13S	ON	13N	27N	40N	53N	65N	75N			
1044	4	2	F	87W	0711	205327	53S	40S	26S	13S	ON	13N	26N	39N	52N	65N				
1045	5	2	F	115W	0711	224656	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N				
1046	6	2	F	143W	0712	004032	53S	40S	27S	13S	ON	13N	26N	39N	52N	65N				
1047	7	2	W	172W	0712	023406	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N	75N	77N		
1048	8	2	W	160E	0712	042744	53S	40S	27S	13S	ON	13N	26N	39N	52N	65N	75N	76N		
1049	9	2	W	131E	0712	062123	53S	40S	26S	13S	ON	13N	26N	39N	52N	65N	75N			
1050	10	2	W	103E	0712	081506	52S	39S	26S	13S	ON	13N	27N	40N	53N	65N	75N			
1051	11	2	W	75E	0712	100850	52S	39S	26S	12S	ON	14N	27N	40N	53N	66N	76N			
1052	12	2	F	46E	0712	120230	51S	38S	25S	12S	1N	14N	28N	41N	54N	66N	76N			
1053	13	2	F	18E	0712	135611	51S	38S	25S	12S	ON	14N	27N	40N	53N	66N	76N			
1054	1	2	F	11W	0712	154933	52S	39S	26S	13S	ON	13N	27N	40N	53N	65N	75N			
1055	2	2	F	39W	0712	174258	53S	40S	26S	13S	ON	13N	26N	39N	52N	65N	75N			
1056	3	2	F	67W	0712	193626	53S	40S	27S	14S	ON	12N	26N	39N	52N	64N	75N			

PASS	TRACK	C	S	ALON	MODA	HRMNSE	SUD SATELLITE POINT PICTURE LOCATION											
							LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT
1057	4	2	F	96W	0712	212956	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N	75N	77N
1058	5	2	F	124W	0712	232329	53S	40S	27S	14S	1S	12N	25N	38N	52N	64N	75N	77N
1059	6	2	F	153W	0713	011706	53S	40S	27S	14S	ON	12N	25N	39N	52N			
1060	7	2	V	179E	0713	031044	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N	75N	77N
1061	8	2	V	151E	0713	050424	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N	75N	77N
1062	9	2	V	122E	0713	065807	53S	40S	26S	13S	ON	13N	26N	39N	52N	65N	75N	15
1063	10	2	V	94E	0713	085153	52S	39S	26S	13S	ON	13N	27N	40N	53N	65N	76N	
1064	11	1	F	66E	0713	104535	52S	39S	26S	12S	ON	14N	27N	40N	53N	66N	76N	
1065	12	1	F	37E	0713	123925	51S	38S	25S	11S	1N	14N	28N	41N	54N	66N	76N	
1066	13	1	F	9E	0713	143301	51S	38S	25S	12S	1N	14N	27N	41N	54N	66N	76N	
1067	1	1	F	20W	0712	162623	52S	39S	26S	12S	ON	13N	27N	40N	53N	65N	75N	
1068	2	1	F	48W	0713	181948	52S	39S	26S	13S	ON	13N	26N	39N	52N	65N	75N	
1069	3	1	F	76W	0713	201316	53S	40S	27S	13S	ON	13N	26N	39N	52N	65N	75N	
1070	4	1	F	105W	0713	220646	53S	40S	27S	14S	ON	12N	26N	39N	52N	64N		
1071	5	1	F	133W	0714	000016	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N		
1072	6	1	F	162W	0714	015351	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N		
1073	7	1	V	170E	0714	034729	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N	75N	
1074	8	1	V	142E	0714	054109	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N	75N	77N
1075	9	1	V	113E	0714	073451	53S	40S	27S	13S	ON	13N	26N	39N	52N	65N	75N	
1076	10	1	V	85E	0714	092837	52S	39S	26S	13S	ON	13N	27N	40N	53N	65N	75N	
1077	11	1	F	56E	0714	112224	52S	39S	25S	12S	ON	14N	27N	40N	53N	66N	76N	
1078	12	1	F	28E	0714	131615	51S	38S	25S	11S	1N	15N	28N	41N	54N	67N	76N	
1079	1	1	F	0W	0714	150949	51S	38S	25S	12S	1N	14N	28N	41N	54N	66N	76N	
1080	2	1	V	29W	0714	170731	39S	29S	13S	1N	13N	28N	41N	53N	66N	76N		
1081	3	1	F	57W	0714	185637	52S	39S	26S	13S	ON	13N	26N	40N	53N	65N	75N	
1082	4	1	F	86W	0714	205004	53S	40S	26S	13S	ON	13N	26N	39N	52N	65N		
1083	5	1	F	114W	0714	224335	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N		
1084	6	1	F	142W	0715	003708	53S	40S	27S	13S	ON	12N	26N	39N	52N			
1085	7	1	V	171W	0715	023043	53S	40S	27S	14S	ON	12N	26N	39N	52N	64N	75N	77N
1086	8	1	V	161E	0715	042421	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N	75N	77N
1087	9	1	V	132E	0715	061801	53S	40S	27S	13S	ON	13N	26N	39N	52N	65N	75N	
1088			NO	PICTURES RECEIVED														
1089	11	1	V	76E	0715	100529	52S	39S	26S	12S	ON	14N	27N	40N	53N	66N	76N	
1090	12	1	F	47E	0715	115917	51S	38S	25S	12S	1N	14N	28N	41N	54N	66N	76N	
1091	13	1	F	19E	0715	135307	51S	38S	24S	11S	2N	15N	28N	42N	55N	67N	76N	
1092	1	1	F	10W	0715	154641	51S	38S	24S	11S	1N	15N	28N	41N	54N	66N	76N	
1093	2	1	F	38W	0715	174002	51S	38S	25S	12S	ON	14N	27N	40N	53N	66N	76N	
1094	3	1	F	66W	0715	193326	52S	39S	26S	13S	ON	13N	27N	40N	53N	65N		
1095	4	1	F	95W	0715	212653	52S	39S	26S	13S	ON	13N	26N	39N	52N	65N		
1096	5	1	F	123W	0715	232022	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N		
1097	6	1	F	152W	0716	011355	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N		
1098	7	1	V	180W	0716	030729	53S	40S	27S	13S	ON	12N	26N	39N	52N	64N	75N	77N
1099	8	1	V	152E	0716	050106	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N	75N	77N
1100	9	1	V	123E	0716	065445	53S	41S	28S	14S	1S	13N	27N	39N	53N	65N	76N	
1101	10	1	V	94E	0716	084827	53S	40S	28S	13S	ON	13N	27N	39N	53N	66N	76N	
1102	11	1	F	66E	0716	104211	52S	39S	26S	12S	ON	13N	27N	40N	53N	65N	76N	76N
1103	12	1	F	38E	0716	123558	52S	39S	25S	12S	1N	14N	27N	41N	54N	66N	76N	76N
1104	13	1	F	10E	0716	142931	52S	39S	25S	12S	ON	14N	27N	40N	53N	65N	76N	
1105	1	1	F	19W	0716	162254	52S	39S	26S	13S	ON	13N	26N	39N	53N	65N	75N	
1106	2	1	F	47W	0716	181619	53S	40S	27S	13S	ON	12N	26N	39N	52N	64N	75N	
1107	3	1	F	75W	0716	200947	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N		
1108	4	1	F	104W	0716	220317	54S	41S	27S	14S	1S	12N	25N	38N	51N	64N		
1109	5	1	F	132W	0716	235651	54S	41S	27S	14S	1S	12N	25N	38N	51N	64N		
1110	6	1	F	161W	0717	015026	54S	41S	27S	14S	1S	12N	25N	38N	51N			
1111	7	1	V	171E	0717	034404	54S	41S	27S	14S	1S	12N	25N	38N	52N	64N	75N	77N
1112	8	1	V	143E	0717	053744	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N	75N	77N
1113	9	1	V	114E	0717	073127	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N	75N	15
1114	10	1	V	86E	0717	092512	53S	40S	26S	13S	ON	13N	26N	40N	53N	65N	75N	15
1115	11	1	F	57E	0717	111900	52S	39S	26S	12S	ON	14N	27N	40N	53N	66N	76N	15
1116	12	1	F	29E	0717	131251	51S	38S	25S	11S	1N	14N	28N	41N	54N	66N	76N	15
1117	13	1	F	1E	0716	150625	51S	38S	25S	12S	1N	14N	27N	41N	54N	66N	76N	17
1118	1	1	F	28W	0716	165948	52S	39S	26S	12S	ON	13N	27N	40N	53N	65N	75N	17
1119	2	1	F	56W	0717	185313	52S	39S	26S	13S	ON	13N	26N	39N	52N	65N	75N	15
1120	3	1	F	85W	0717	204640	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N	14	15
1121	4	1	F	113W	0717	224011	53S	40S	27S	14S	ON	12N	26N	39N	52N	64N	14	15
1122	5	1	F	141W	0718	003343	53S	40S	27S	14S	ON	12N	25N	39N	52N	13	14	15
1123	6	1	V	170W	0718	022718	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N	75N	77N
1124	7	1	V	162E	0718	042055	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N	75N	77N
1125	8	1	F	133E	0701	061435	53S	41S	27S	15S	1S	13N	27N	39N	53N	65N	75N	
1126	9	1	V	105E	0718	080817	53S	41S	27S	13S	1S	13N	27N	39N	53N	65N	76N	
1127	10	1	V	77E	0718	100202	52S	39S	26S	13S	ON	13N	27N	40N	53N	65N	75N	15
1128	11	1	F	48E	0718	115550	52S	39S	25S	12S	ON	14N	27N	40N	54N	66N	76N	15
1129	12	1	F	20E	0718	134940	51S	38S	25S	11S	1N	15N	28N	41N	54N	67N	76N	15
1130	1	1	F	9W	0718	154314	51S	38S	25S	12S	1N	14N	28N	41N	54N	66N	76N	15
1131	2	1	F	37W	0718	173636	52S	39S	26S	12S	ON	13N	27N	40N	53N	65N	76N	15

PASS	TRACK	C	S	ALON	MODA	HRMNSL	SUB-SATELLITE POINT PICTURE LOCATION									
							LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT
1132	3	I	F	65W	0710	193001	52S	39S	26S	13S	ON	13N	26N	40N	53N	65N 75N 15
1133	4	I	F	94W	0710	212329	53S	40S	27S	13S	ON	13N	26N	39N	52N	65N 14 15
1134	5	I	F	122W	0710	231659	53S	40S	27S	13S	ON	12N	26N	39N	52N	64N 14 15
1135	6	I	F	151W	0719	011033	53S	40S	27S	14S	ON	12N	26N	39N	52N	64N 14 15
1136	7	I	W	179W	0719	030408	53S	40S	27S	14S	ON	12N	26N	39N	52N	64N 75N 77N
1137	8	I	W	153E	0719	045746	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N 75N 77N
1138	9	I	W	124E	0719	065126	53S	40S	27S	13S	ON	13N	26N	39N	52N	65N 75N 15
1139	10	I	W	96E	0719	084509	52S	39S	26S	13S	ON	13N	26N	40N	53N	65N 75N 15
1140	11	I	F	67E	0719	103854	52S	39S	26S	12S	ON	13N	27N	40N	53N	66N 76N 76N
1141	12	I	F	39E	0719	123242	51S	38S	25S	12S	1N	14N	28N	41N	54N	66N 76N 76N
1142	13	I	F	11E	0719	142615	52S	39S	25S	12S	ON	14N	27N	40N	53N	66N 76N 15
1143	1	I	F	18W	0719	161938	52S	39S	26S	13S	ON	13N	26N	40N	53N	65N 75N 15
1144	2	I	F	46W	0719	181303	53S	40S	27S	13S	ON	13N	26N	39N	52N	65N 75N 15
1145	3	I	F	75W	0719	200631	53S	40S	27S	14S	ON	12N	26N	39N	52N	64N 14 15
1146	4	I	F	103W	0719	220001	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N 76N 15
1147	5	I	F	131W	0719	235321	42S	28S	16S	3S	12N	25N	37N	52N		
1148	6	I	F	160W	0720	014706	54S	41S	28S	14S	1S	12N	25N	38N	51N	06 07 08
1149	7	I	W	172E	0720	034044	54S	41S	27S	14S	1S	12N	25N	38N	52N	64N 75N 77N
1150	8	I	W	143E	0720	053424	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N 75N 77N
1151	9	I	W	115E	0720	072806	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N 75N 15
1152	10	I	W	87E	0720	092151	53S	40S	26S	13S	ON	13N	26N	40N	53N	65N 75N 15
1153	11	I	F	58E	0720	111539	52S	39S	26S	12S	ON	13N	27N	40N	53N	66N 76N 15
1154	12	I	F	30E	0720	130928	51S	38S	25S	12S	1N	14N	28N	41N	54N	66N 76N 15
1155	13	I	F	2E	0720	150303	51S	38S	25S	12S	ON	14N	27N	40N	53N	66N 76N 15
1156	1	I	F	27W	0720	165625	52S	39S	26S	13S	ON	13N	27N	40N	53N	65N 75N 15
1157	2	I	F	55W	0720	184950	53S	40S	26S	13S	ON	13N	26N	39N	52N	65N 75N 15
1158	3	I	F	84W	0720	204318	53S	40S	27S	13S	ON	12N	26N	39N	52N	64N 14 15
1159	4	I	F	112W	0720	223648	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N 14 15
1160	5	I	F	140W	0721	003022	53S	40S	27S	14S	ON	12N	25N	39N	52N	13 14 15
1161	6	I	W	169W	0721	022358	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N 75N 77N
1162	7	I	W	163E	0721	041735	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N 75N 77N
1163	8	I	W	134E	0721	061116	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N 75N 15
1164	9	I	W	106E	0721	080459	53S	40S	26S	13S	ON	13N	26N	39N	52N	65N 75N 15
1165	10	I	W	78E	0721	095844	52S	39S	26S	13S	ON	13N	27N	40N	53N	65N 76N 15
1166	11	I	F	49E	0721	115652	53S	39S	26S	13S	1N	14N	27N	41N	54N	67N 76N
1167	12	I	F	21E	0721	134622	51S	38S	25S	11S	1N	15N	28N	41N	54N	67N 76N 15
1168	1	I	F	8W	0721	153956	51S	38S	25S	11S	1N	14N	28N	41N	54N	66N 76N 15
1169	2	I	F	36W	0721	173319	52S	39S	25S	12S	ON	14N	27N	40N	53N	66N 76N 15
1170	3	I	F	64W	0721	192644	52S	39S	26S	13S	ON	13N	26N	40N	53N	65N 75N 15
1171	4	I	F	93W	0721	212012	53S	40S	26S	13S	ON	13N	26N	39N	52N	65N 14 15
1172	5	I	F	121W	0721	231342	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N 14 15
1173	6	I	F	150W	0722	010715	53S	40S	27S	13S	ON	12N	26N	39N	52N	06 07 08
1174	7	I	W	178W	0722	030050	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N 75N 77N
1175	8	I	W	154E	0722	045428	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N 75N 76N
1176	9	I	W	125E	0722	064808	53S	40S	26S	13S	ON	13N	26N	39N	52N	65N 75N 15
1177	10	I	W	97E	0722	084151	52S	39S	26S	13S	ON	13N	26N	40N	53N	65N 75N 15
1178	11	I	W	68E	0722	103536	52S	39S	26S	12S	ON	14N	27N	40N	53N	66N 76N 15
1179	12	I	F	40E	0722	122324	51S	38S	25S	12S	1N	14N	28N	41N	54N	66N 76N 15
1180	13	I	F	12E	0722	142257	51S	38S	25S	12S	ON	14N	27N	40N	53N	66N 76N 15
1181	1	I	F	17W	0722	161619	52S	39S	26S	13S	ON	13N	26N	40N	53N	65N 75N 15
1182	2	I	F	45W	0722	180944	53S	40S	26S	13S	ON	13N	26N	39N	52N	65N 75N 15
1183	3	I	F	74W	0722	200312	53S	40S	27S	14S	ON	12N	26N	39N	52N	64N 14 15
1184	4	I	F	102W	0722	215642	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N 14 15
1185	5	I	F	130W	0722	235016	53S	40S	27S	14S	1S	12N	25N	39N	52N	13 14 15
1186	6	I	F	159W	0723	014351	53S	40S	27S	14S	1S	12N	25N	39N	52N	13 14 15
1187	7	I	W	173E	0723	033729	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N 75N 77N
1188	8	I	W	144E	0723	053109	53S	40S	27S	14S	ON	12N	26N	39N	52N	65N 75N 77N
1189	9	I	W	116E	0723	072452	53S	40S	27S	13S	ON	13N	26N	39N	52N	65N 75N 15
1190	10	I	W	88E	0723	091837	52S	39S	26S	13S	ON	13N	27N	40N	53N	65N 76N 15
1191	11	I	F	59E	0723	111225	52S	39S	25S	12S	ON	14N	27N	40N	54N	66N 76N 15
1192	12	I	F	31E	0723	130616	51S	38S	25S	11S	1N	15N	28N	41N	54N	67N 76N 15
1193	13	I	F	2E	0723	145949	51S	38S	25S	12S	1N	14N	27N	41N	54N	66N 76N 15
1194	1	I	F	26W	0723	165311	52S	39S	26S	12S	ON	13N	27N	40N	53N	66N 76N 15
1195	2	I	F	54W	0723	184635	52S	39S	26S	13S	ON	13N	26N	39N	53N	65N 75N 15
1196	3	I	F	83W	0723	204001	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N 14 15
1197	4	I	F	111W	0723	223331	53S	40S	27S	14S	ON	12N	26N	39N	52N	64N 14 15
1198	5	I	F	139W	0724	002703	53S	40S	27S	14S	ON	12N	25N	39N	52N	13 14 15
1199	6	I	F	168W	0724	022037	53S	40S	27S	14S	1S	12N	25N	39N	52N	13 14 15
1200	7	I	W	164E	0724	041414	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N 75N 77N
1201	8	I	W	135E	0724	060753	53S	40S	27S	14S	ON	12N	26N	39N	52N	64N 75N 77N
1202	9	I	W	107E	0724	080134	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N 75N 15
1203	10	I	W	79E	0724	095518	53S	40S	26S	13S	ON	13N	26N	40N	53N	65N 75N 15
1204	11	I	F	50E	0724	114905	52S	39S	26S	12S	ON	14N	27N	40N	53N	66N 76N 15
1205	12	I	F	22E	0724	134254	51S	38S	25S	12S	1N	14N	28N	41N	54N	66N 76N 15
1206	1	I	F	7W	0724	153628	51S	38S	25S	12S	ON	14N	27N	40N	53N	66N 76N 15

PASS	TRACK	C	S	ALON	MODA	HRMNSE	SUB-SATELLITE POINT PICTURE LOCATION											
							LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT		
1207	2	I	F	35W	0724	172951	52S	39S	26S	13S	ON	13N	27N	40N	53N	65N	75N	15
1208	3	I	F	63W	0724	192316	53S	40S	26S	13S	ON	13N	26N	39N	52N	65N	75N	15
1209	4	I	F	92W	0724	211644	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N	14	15
1210	5	I	F	120W	0724	231014	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N	14	15
1211	6	I	F	149W	0725	010340	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N	14	15
1212	7	I	W	177W	0725	025724	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N	75N	77N
1213	8	I	W	155E	0725	045101	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N	75N	77N
1214	9	I	W	126E	0725	064442	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N	75N	15
1215	10	I	W	98E	0725	083025	53S	40S	26S	13S	ON	13N	26N	39N	53N	65N	75N	15
1216	11	I	W	69E	0725	103210	52S	39S	26S	13S	ON	13N	27N	40N	53N	66N	76N	15
1217	12	I	F	41E	0725	122550	52S	39S	25S	12S	ON	14N	27N	41N	54N	66N	76N	15
1218	13	I	F	13E	0725	141940	51S	38S	25S	11S	1N	15N	28N	41N	54N	67N	76N	15
1219	1	I	F	16W	0725	161323	51S	38S	25S	11S	1N	14N	28N	41N	54N	66N	76N	15
1220	2	I	F	44W	0725	180645	52S	39S	25S	12S	ON	14N	27N	40N	53N	66N	76N	15
1221	3	I	F	73W	0725	200010	52S	39S	26S	13S	ON	13N	26N	40N	53N	65N	14	15
1222	4	I	F	101W	0725	215338	53S	40S	26S	13S	ON	13N	26N	39N	52N	65N	14	15
1223	5	I	F	129W	0725	234700	53S	40S	27S	13S	ON	12N	26N	39N	52N	13	14	15
1224	6	I	F	158W	0726	014040	53S	40S	27S	14S	ON	12N	26N	39N	52N	13	14	15
1225	7	I	W	174E	0726	033415	53S	40S	27S	14S	ON	12N	26N	39N	52N	65N	75N	77N
1226	8	I	W	145E	0726	052753	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N	75N	76N
1227	9	I	W	117E	0726	072132	53S	40S	27S	13S	ON	13N	26N	39N	52N	65N	75N	15
1228	10	I	W	89E	0726	091515	52S	39S	26S	13S	ON	13N	26N	40N	53N	65N	75N	15
1229	11	I	F	60E	0726	110900	52S	39S	26S	12S	ON	13N	27N	40N	53N	66N	76N	15
1230	12	I	F	32E	0726	130247	51S	38S	25S	12S	1N	14N	27N	41N	54N	66N	76N	15
1231	13	I	F	3E	0726	145620	52S	39S	25S	12S	ON	14N	27N	40N	53N	66N	76N	15
1232	1	I	F	25W	0726	164942	52S	39S	26S	13S	ON	13N	26N	40N	53N	65N	75N	15
1233	2	I	F	53W	0726	184307	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N	75N	15
1234	3	I	F	82W	0726	203634	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N	14	15
1235	4	I	F	110W	0726	223004	53S	41S	27S	14S	1S	12N	25N	38N	52N	64N	14	15
1236	5	I	F	139W	0727	002334	54S	41S	28S	14S	1S	11N	25N	38N	51N	13	14	15
1237	6	I	F	167W	0727	021708	54S	41S	28S	14S	1S	11N	25N	38N	51N	13	14	15
1238	7	I	W	165E	0727	041045	54S	41S	28S	14S	1S	11N	25N	38N	51N	64N	75N	77N
1239	8	I	W	136E	0727	060424	54S	41S	27S	14S	1S	12N	25N	38N	51N	64N	75N	77N
1240	9	I	W	108E	0727	075806	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N	75N	15
1241	10	I	W	80E	0727	095151	53S	40S	27S	13S	ON	13N	26N	39N	52N	65N	75N	15
1242	11	I	F	51E	0727	114537	52S	39S	26S	13S	ON	13N	26N	40N	53N	65N	76N	15
1243	12	I	F	23E	0727	133927	52S	39S	25S	12S	ON	14N	27N	41N	54N	66N	76N	15
1244	1	I	F	6W	0727	153300	52S	39S	26S	12S	ON	13N	27N	40N	53N	65N	76N	15
1245	2	I	F	34W	0727	172621	53S	40S	26S	13S	ON	13N	26N	39N	52N	65N	75N	15
1246	3	I	F	62W	0727	191945	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N	75N	15
1247	4	I	F	91W	0727	211311	54S	41S	27S	14S	1S	12N	25N	38N	51N	64N	14	15
1248	5	I	F	119W	0727	230639	54S	41S	28S	15S	1S	11N	25N	38N	51N	64N	14	15
1249	6	I	F	148W	0728	010015	54S	41S	28S	15S	1S	11N	25N	38N	51N	64N	14	15
1250	7	I	W	176W	0728	025349	54S	41S	28S	15S	1S	11N	25N	38N	51N	64N	74N	77N
1251	8	I	W	156E	0728	044726	54S	41S	28S	15S	1S	11N	25N	38N	51N	64N	74N	77N
1252	9	I	W	127E	0728	064105	54S	41S	28S	14S	1S	11N	25N	38N	51N	64N	75N	15
1253	10	I	W	99E	0728	083447	54S	41S	27S	14S	1S	12N	25N	39N	52N	64N	75N	15
1254	11	I	W	70E	0728	102831	53S	40S	27S	14S	ON	12N	26N	39N	52N	65N	75N	15
1255	12	I	F	42E	0728	122218	53S	40S	26S	13S	ON	13N	26N	40N	53N	65N	75N	15
1256	13	I	F	14E	0728	141600	52S	39S	26S	12S	ON	14N	27N	40N	53N	66N	76N	15
1257	1	I	F	15W	0728	160942	52S	39S	26S	13S	ON	13N	27N	40N	53N	65N	75N	15
1258	2	I	F	43W	0728	180304	53S	40S	27S	13S	ON	13N	26N	39N	52N	65N	75N	15
1259	3	I	F	72W	0728	195629	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N	14	15
1260	4	I	F	100W	0728	214957	54S	41S	27S	14S	1S	12N	25N	38N	51N	64N	14	15
1261	5	I	F	128W	0728	234327	54S	41S	28S	14S	1S	11N	25N	38N	51N	13	14	15
1262	6	I	F	157W	0729	013700	54S	41S	28S	15S	1S	11N	25N	38N	51N	13	14	15
1263	7	I	W	175E	0729	033023	55S	42S	29S	15S	2S	10N	24N	37N	50N	63N	74N	77N
1264	8	I	W	146E	0729	052344	55S	42S	29S	16S	3S	10N	23N	36N	50N	62N	73N	77N
1265	9	I	W	118E	0729	071707	56S	43S	30S	17S	3S	9N	22N	36N	49N	62N	73N	15
1266	10	I	W	90E	0729	091033	56S	44S	30S	17S	4S	9N	22N	35N	48N	61N	73N	15
1267	11	I	F	62E	0729	110402	57S	44S	32S	18S	4S	8N	23N	36N	48N	62N	73N	
1268	12	I	F	32E	0729	115733	57S	45S	32S	18S	5S	8N	22N	35N	48N	62N	73N	
1269	13	I	F	6E	0729	143106	63S	45S	32S	18S	5S	8N	22N	35N	48N	62N	73N	
1270	1	I	F	24W	0729	164442	57S	44S	31S	18S	4S	8N	21N	35N	48N	61N	72N	15
1271	2	I	F	52W	0729	183820	57S	44S	31S	18S	4S	8N	22N	35N	48N	61N	72N	15
1272	3	I	F	81W	0729	203201	57S	44S	31S	17S	4S	8N	22N	35N	48N	61N	14	15
1273	4	I	F	109W	0729	222545	56S	43S	30S	17S	4S	9N	22N	36N	49N	62N	14	15
1274	5	I	F	138W	0730	001945	55S	42S	29S	16S	2S	10N	24N	37N	50N	13	14	15
1275	6	I	F	166W	0730	021335	54S	42S	28S	15S	2S	11N	24N	38N	51N	13	14	15
1276	7	I	W	166E	0730	040720	54S	41S	27S	14S	1S	12N	25N	39N	52N	64N	75N	77N
1277	8	I	W	137E	0730	060123	53S	40S	26S	13S	ON	13N	26N	40N	53N	65N	75N	77N
1278	9	I	W	109E	0730	075502	53S	40S	26S	13S	ON	13N	26N	39N	52N	65N	75N	15
1279	10	I	W	80E	0730	094025	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N	75N	15
1280	11	I	F	52E	0730	114150	54S	41S	28S	14S	1S	11N	25N	38N	51N	64N	75N	15
1281	12	I	F	24E	0730	133517	54S	41S	28S	15S	1S	11N	24N	38N	51N	63N	74N	15

PASS	TRACK	C	S	ALON	MODA	HRMNSE	SUB-SATELLITE POINT PICTURE LOCATION											
							LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT
1282	1	1	F	5W	0730	152842	55S	42S	29S	15S	2S	10N	24N	37N	50N	63N	74N	15
1283	2	1	F	33W	0730	172204	55S	42S	29S	16S	3S	10N	23N	36N	50N	62N	73N	15
1284	3	1	F	62W	0730	191520	56S	43S	30S	17S	3S	9N	23N	36N	49N	62N	73N	15
1285	4	1	F	90W	0730	210855	56S	44S	30S	17S	4S	9N	22N	35N	49N	61N	14	15
1286	5	1	F	118W	0730	230225	57S	44S	31S	17S	4S	8N	22N	35N	48N	61N	14	15
1287	6	1	F	147W	0731	005555	57S	44S	31S	18S	4S	8N	22N	35N	48N	61N	14	15
1288	7	1	F	175W	0731	024929	57S	44S	31S	18S	4S	8N	21N	35N	48N	61N	72N	78N
1289	8	1	W	157E	0731	044306	57S	44S	31S	18S	4S	8N	22N	35N	48N	61N	72N	78N
1290	9	1	W	128E	0731	063645	57S	44S	31S	17S	4S	8N	22N	35N	48N	61N	72N	15
1291	10	1	W	100E	0731	083027	56S	44S	30S	17S	4S	9N	22N	35N	49N	61N	73N	15
1292	11	1	W	71E	0731	102411	56S	43S	30S	17S	3S	9N	23N	36N	49N	62N	73N	15
1293	12	1	F	43E	0731	121750	56S	43S	29S	16S	3S	10N	23N	37N	50N	62N	74N	15
1294	13	1	F	15E	0731	141147	55S	42S	29S	15S	2S	10N	24N	37N	50N	63N	74N	15
1295	1	1	F	14W	0731	160522	55S	42S	29S	16S	2S	10N	24N	37N	50N	63N	74N	15
1296	2	1	F	42W	0731	175847	55S	43S	29S	16S	3S	10N	23N	36N	49N	62N	73N	15
1297	3	1	F	71W	0731	195214	56S	43S	30S	17S	3S	9N	23N	36N	49N	62N	14	15
1298	4	1	F	99W	0731	214544	56S	43S	30S	17S	3S	9N	22N	36N	49N	62N	14	15
1299	5	1	F	127W	0731	233926	56S	43S	30S	17S	3S	9N	23N	36N	49N	13	14	15
1300	6	1	F	156W	0801	013303	56S	43S	30S	16S	3S	9N	23N	36N	49N	13	14	15
1301	7	1	W	176E	0801	032643	56S	43S	30S	16S	3S	10N	23N	36N	50N	62N	73N	77N
1302	8	1	W	147E	0801	052025	55S	42S	29S	16S	2S	10N	23N	37N	50N	63N	74N	77N
1303	9	1	W	119E	0801	071409	55S	42S	29S	15S	2S	10N	24N	37N	50N	63N	74N	15
1304	10	1	W	90E	0801	090756	55S	42S	34S	16S	2S	8N	25N	38N	52N	64N	75N	
1305	11	1	F	62E	0801	110146	54S	41S	27S	15S	2S	13N	26N	39N	52N	64N	75N	77N
1306	12	1	F	29E	0801	125538	54S	42S	28S	14S	2S	13N	26N	39N	52N	64N	76N	77N
1307	13	1	F	5E	0801	144915	53S	41S	28S	14S	1S	13N	26N	39N	53N	65N	76N	
1308	1	1	F	23W	0801	164238	53S	41S	27S	14S	1S	12N	25N	38N	52N	64N	75N	15
1309	2	1	F	51W	0801	183604	54S	41S	28S	15S	1S	11N	25N	38N	51N	64N	74N	15
1310	3	1	F	80W	0801	202933	54S	41S	28S	15S	1S	11N	24N	38N	51N	63N	14	15
1311	4	1	F	108W	0801	222304	54S	42S	28S	15S	2S	11N	24N	37N	51N	63N	14	15
1312	5	1	F	137W	0802	001638	55S	42S	28S	15S	2S	11N	24N	37N	51N	13	14	15
1313	6	1	F	165W	0802	021015	55S	42S	28S	15S	2S	11N	24N	37N	51N	13	14	15
1314	7	1	W	167E	0802	040354	54S	41S	28S	15S	2S	11N	24N	38N	51N	63N	74N	77N
1315	8	1	W	138E	0802	055735	54S	41S	28S	15S	1S	11N	25N	38N	51N	64N	74N	77N
1316	9	1	W	110E	0802	075119	54S	41S	28S	14S	1S	12N	25N	38N	52N	64N	75N	15
1317	10	1	W	81E	0802	094505	53S	40S	27S	14S	0N	12N	26N	39N	52N	65N	75N	15
1318	11	1	F	53E	0802	113854	53S	40S	26S	13S	0N	13N	26N	40N	53N	65N	76N	76N
1319	12	1	F	25E	0802	133229	53S	40S	26S	13S	0N	13N	26N	39N	52N	65N	75N	15
1320	1	1	F	4W	0802	152551	53S	40S	27S	14S	1S	12N	25N	39N	52N	64N	75N	15
1321	2	1	F	32W	0802	171916	54S	41S	28S	14S	1S	11N	25N	38N	51N	64N	74N	15
1322	3	1	F	61W	0802	191244	54S	41S	28S	15S	1S	11N	24N	38N	51N	63N	74N	15
1323	4	1	F	89W	0802	210614	54S	42S	28S	15S	2S	11N	24N	37N	51N	63N	14	15
1324	5	1	F	117W	0802	225947	55S	42S	29S	15S	2S	11N	24N	37N	50N	63N	14	15
1325	6	1	F	146W	0803	005317	55S	42S	29S	16S	2S	10N	24N	37N	50N	63N	14	15
1326	7	1	W	174W	0803	024653	55S	42S	29S	15S	2S	10N	24N	37N	50N	63N	74N	77N
1327	8	1	W	157E	0803	044033	55S	42S	29S	15S	2S	11N	24N	37N	51N	63N	74N	77N
1328	9	1	W	129E	0803	063415	54S	41S	28S	15S	2S	11N	24N	38N	51N	64N	74N	15
1329	10	1	W	101E	0803	082759	54S	41S	28S	14S	1S	11N	25N	38N	51N	64N	75N	15
1330	11	1	W	72E	0803	102146	53S	40S	27S	14S	0N	12N	25N	39N	52N	64N	75N	15
1331	12	1	F	44E	0803	121536	53S	40S	27S	13S	0N	13N	26N	40N	53N	65N	75N	15
1332	13	1	F	15E	0803	140928	52S	39S	26S	12S	0N	14N	27N	40N	53N	66N	76N	15
1333	1	1	F	13W	0803	160303	52S	39S	26S	13S	0N	13N	27N	40N	53N	65N	76N	15
1334	2	1	F	41W	0803	175625	53S	40S	26S	13S	0N	13N	26N	39N	52N	65N	75N	15
1335	3	1	F	70W	0803	194951	53S	40S	27S	14S	0N	12N	26N	39N	52N	64N	14	15
1336	4	1	F	98W	0803	214318	54S	41S	27S	14S	1S	12N	25N	38N	52N	64N	14	15
1337	5	1	F	126W	0803	233647	54S	41S	28S	14S	1S	11N	25N	38N	51N	13	14	15
1338	6	1	F	155W	0804	013019	54S	41S	28S	15S	1S	11N	25N	38N	51N	13	14	15
1339	7	1	W	177E	0804	032354	54S	41S	28S	15S	1S	11N	25N	38N	51N	64N	74N	77N
1340	8	1	W	148E	0804	051731	54S	41S	28S	15S	1S	11N	25N	38N	51N	64N	75N	77N
1341	9	1	W	120E	0804	071111	54S	41S	28S	14S	1S	12N	25N	38N	51N	64N	75N	15
1342	10	1	W	92E	0804	090453	54S	41S	27S	14S	1S	12N	25N	39N	52N	64N	75N	15
1343	11	1	W	63E	0804	105030	53S	40S	27S	14S	0N	12N	26N	39N	52N	65N	75N	15
1344	12	1	F	35E	0804	125225	53S	40S	26S	13S	0N	13N	26N	40N	53N	65N	76N	15
1345	13	1	F	6E	0804	144615	52S	39S	26S	12S	0N	14N	27N	41N	54N	66N	76N	15
1346	1	1	F	22W	0804	163949	52S	39S	26S	12S	0N	13N	27N	40N	53N	66N	76N	15
1347	2	1	F	50W	0804	183311	53S	40S	26S	13S	0N	13N	26N	39N	52N	65N	75N	15
1348	3	1	F	79W	0804	202636	53S	40S	27S	14S	0N	12N	26N	39N	52N	64N	14	15
1349	4	1	F	107W	0804	222003	54S	41S	27S	14S	1S	12N	25N	38N	52N	64N	14	15
1350	5	1	F	136W	0805	001336	54S	41S	28S	14S	1S	12N	25N	38N	51N	13	14	15
1351	6	1	F	164W	0805	020708	54S	41S	28S	14S	1S	11N	25N	38N	51N	13	14	15
1352	7	1	W	168E	0805	040044	54S	41S	28S	14S	1S	11N	25N	38N	51N	64N	75N	77N
1353	8	1	W	139E	0805	055422	54S	41S	28S	14S	1S	12N	25N	38N	51N	64N	75N	77N
1354	9	1	W	111E	0805	074802	54S	41S	27S	14S	1S	12N	25N	39N	52N	64N	75N	15
1355	10	1	W	82E	0805	094145	53S	40S	27S	14S	0N	12N	26N	39N	52N	65N	75N	15
1356	11	1	F	54E	0805	113530	53S	40S	27S	13S	0N	13N	26N	39N	53N	65N	75N	76N

PASS TRACK	C	S	ALON	MODA	HRMNSE	SUB-SATELLITE POINT PICTURE LOCATION
						LAT LAT LAT LAT LAT LAT LAT LAT LAT LAT LAT LAT LAT
1357						
1358						
1359	2	I	F	31W	0805 171614	53S 40S 27S 13S ON 12N 26N 39N 52N 65N 75N 15
1360	3	I	F	60W	0805 190939	53S 41S 27S 14S IS 12N 25N 38N 52N 64N 75N 15
1361	4	I	F	80W	0805 210306	54S 41S 20S 14S IS 11N 25N 38N 51N 64N 14 15
1362	5	I	F	116W	0805 225635	54S 41S 20S 15S IS 11N 24N 38N 51N 64N 14 15
1363	6	I	F	145W	0806 005016	54S 41S 20S 15S IS 11N 25N 38N 51N 64N 14 15
1364	7	I	F	173W	0806 024351	54S 41S 20S 15S IS 11N 25N 38N 51N 13 14 15
1365	8	I	W	150E	0806 043729	54S 41S 20S 14S IS 11N 25N 38N 51N 64N 75N 77N
1366	9	I	W	130E	0806 063109	54S 41S 20S 14S IS 12N 25N 38N 52N 64N 75N 15
1367	10	I	W	102E	0806 082452	53S 40S 27S 14S ON 12N 26N 39N 52N 65N 75N 15
1368	11	I	W	73E	0806 101837	53S 40S 27S 13S ON 13N 26N 39N 52N 65N 75N 15
1369	12	I	F	45E	0806 121225	52S 39S 26S 13S ON 13N 27N 40N 53N 66N 76N 15
1370	13	I	F	16E	0806 140615	52S 39S 25S 12S 1N 14N 27N 41N 54N 66N 76N 15
1371	1	I	F	12W	0806 155949	52S 39S 26S 12S ON 14N 27N 40N 53N 66N 76N 15
1372	2	I	F	40W	0806 175312	52S 39S 26S 13S ON 13N 26N 40N 53N 65N 75N 15
1373	3	I	F	69W	0806 194637	53S 40S 27S 13S ON 12N 26N 39N 52N 65N 14 15
1374	4	I	F	97W	0806 214005	53S 40S 27S 14S ON 12N 25N 39N 52N 64N 14 15
1375	5	I	F	126W	0806 233332	54S 41S 20S 14S IS 12N 25N 38N 51N 13 14 15
1376	6	I	F	154W	0807 012704	54S 41S 20S 14S IS 11N 25N 38N 51N 13 14 15
1377	7	I	W	178E	0807 032039	54S 41S 20S 14S IS 11N 25N 38N 51N 64N 75N 77N
1378	8	I	W	149E	0807 051416	54S 41S 20S 14S IS 12N 25N 38N 51N 64N 75N 77N
1379	9	I	W	121E	0807 070756	54S 41S 27S 14S IS 12N 25N 39N 52N 64N 75N 15
1380	10	I	W	93E	0807 090139	53S 40S 27S 14S ON 12N 26N 39N 52N 65N 75N 15
1381	11	I	F	64E	0807 105524	53S 40S 27S 13S ON 13N 26N 39N 53N 65N 75N 15
1382	12	I	F	36E	0807 124911	52S 39S 26S 13S ON 13N 27N 40N 53N 66N 76N 15
1383	13	I	F	7E	0807 144244	52S 39S 26S 13S ON 13N 26N 40N 53N 65N 75N 15
1384	1	I	F	21W	0807 163607	53S 40S 27S 14S ON 12N 26N 39N 52N 65N 75N 15
1385	2	I	F	49W	0807 182932	54S 41S 27S 14S IS 12N 25N 38N 52N 64N 75N 15
1386	3	I	F	78W	0807 202300	54S 41S 28S 15S IS 11N 25N 38N 51N 64N 14 15
1387	4	I	F	106W	0807 221630	54S 41S 28S 15S IS 11N 24N 38N 51N 64N 14 15
1388	5	I	F	135W	0808 001002	54S 41S 28S 15S 2S 11N 24N 38N 51N 13 14 15
1389	6	I	F	163W	0808 020338	54S 41S 28S 15S 2S 11N 24N 38N 51N 13 14 15
1390	7	I	W	169E	0808 035715	54S 41S 28S 15S IS 11N 24N 38N 51N 64N 74N 77N
1391	8	I	W	140E	0808 055056	54S 41S 28S 15S IS 11N 25N 38N 51N 64N 75N 77N
1392	9	I	W	112E	0808 074438	54S 41S 28S 14S IS 12N 25N 38N 52N 64N 75N 15
1393	10	I	W	83E	0808 093823	53S 40S 27S 14S ON 12N 26N 39N 52N 65N 75N 15
1394	11	I	F	55E	0808 113211	53S 40S 27S 13S ON 13N 26N 40N 53N 65N 76N 15
1395	12	I	F	27E	0808 132601	52S 39S 26S 12S ON 14N 27N 40N 53N 66N 76N 15
1396	1	I	F	2W	0808 151936	52S 39S 26S 13S ON 13N 27N 40N 53N 65N 76N 15
1397	2	I	F	30W	0808 171258	53S 40S 27S 13S ON 13N 26N 39N 52N 65N 75N 15
1398	3	I	F	59W	0808 190623	53S 40S 27S 14S ON 12N 25N 39N 52N 64N 75N 15
1399	4	I	F	87W	0808 205951	54S 41S 28S 14S IS 12N 25N 38N 51N 64N 14 15
1400	5	I	F	115W	0808 225321	54S 41S 28S 15S IS 11N 25N 38N 51N 64N 14 15
1401	6	I	F	144W	0809 004655	54S 41S 28S 15S IS 11N 25N 38N 51N 64N 14 15
1402	7	I	F	172W	0809 024031	54S 41S 28S 15S IS 11N 25N 38N 51N 64N 75N 77N
1403	8	I	W	159E	0809 043409	54S 41S 28S 14S IS 11N 25N 38N 51N 64N 75N 77N
1404	9	I	W	131E	0809 062749	54S 41S 28S 14S IS 12N 25N 38N 52N 64N 75N 15
1405	10	I	W	103E	0809 082132	53S 40S 27S 14S ON 12N 26N 39N 52N 65N 75N 15
1406	11	I	W	74E	0809 101517	53S 40S 27S 13S ON 13N 26N 39N 53N 65N 75N 15
1407	12	I	F	46E	0809 120905	52S 39S 26S 13S ON 13N 27N 40N 53N 66N 76N 15
1408	13	I	F	17E	0809 140255	52S 39S 25S 12S 1N 14N 27N 41N 54N 66N 76N 15
1409	1	I	F	11W	0808 155629	52S 39S 26S 12S ON 14N 27N 40N 53N 66N 76N 17
1410	2	I	F	39W	0809 174952	52S 39S 26S 13S ON 13N 26N 40N 53N 65N 75N 15
1411	3	I	F	68W	0809 194317	53S 40S 27S 13S ON 12N 26N 39N 52N 65N 14 15
1412	4	I	F	96W	0809 213645	53S 40S 27S 14S ON 12N 25N 39N 52N 64N 14 15
1413	5	I	F	125W	0809 233015	54S 41S 27S 14S IS 12N 25N 39N 52N 64N 14 15
1414	6	I	F	153W	0810 012347	54S 41S 20S 14S IS 12N 25N 38N 52N 64N 14 15
1415	7	I	W	179E	0810 031722	54S 41S 28S 14S IS 12N 25N 38N 52N 64N 75N 77N
1416	8	I	W	150E	0810 051100	54S 41S 20S 14S IS 12N 25N 39N 52N 64N 75N 77N
1417	9	I	W	122E	0810 070439	53S 41S 27S 14S IS 12N 25N 39N 52N 64N 75N 15
1418	10	I	W	93E	0810 085022	53S 40S 27S 14S ON 12N 26N 39N 52N 65N 75N 15
1419	11	I	W	65E	0810 105207	53S 40S 26S 13S ON 13N 26N 40N 53N 65N 76N 15
1420	12	I	F	37E	0810 124554	52S 39S 26S 12S ON 13N 27N 40N 53N 66N 76N 15
1421	13	I	F	8E	0810 143927	52S 39S 26S 13S ON 13N 26N 40N 53N 65N 76N 15
1422	1	I	F	20W	0810 163250	53S 40S 27S 13S ON 12N 26N 39N 52N 65N 75N 15
1423	2	I	F	48W	0810 182615	53S 40S 27S 14S IS 12N 25N 39N 52N 64N 75N 15
1424	3	I	F	77W	0810 201943	54S 41S 20S 14S IS 11N 25N 38N 51N 64N 14 15
1425	4	I	F	105W	0810 221313	54S 41S 20S 15S IS 11N 25N 38N 51N 64N 14 15
1426	5	I	F	134W	0811 000645	54S 41S 20S 15S IS 11N 24N 38N 51N 13 14 15
1427	6	I	F	162W	0811 020020	54S 41S 20S 15S IS 11N 24N 38N 51N 13 14 15
1428	7	I	W	170E	0811 035350	54S 41S 20S 15S IS 11N 25N 38N 51N 64N 75N 77N
1429	8	I	W	141E	0811 054730	54S 41S 20S 14S IS 11N 25N 38N 51N 64N 75N 77N
1430	9	I	W	113E	0811 074120	54S 41S 20S 14S IS 12N 25N 39N 52N 64N 75N 15
1431	10	I	W	84E	0811 093505	53S 40S 27S 14S ON 12N 26N 39N 52N 65N 75N 15

PASS	TRACK	C	S	ALON	MODA	HRMNSE	SUD-SATELLITE				POINT				PICTURE				LOCATION			
							LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT
1432	11	I	F	56E	0011	112053	53S	40S	26S	13S	ON	13N	26N	40N	53N	65N	76N	15				
1433	12	I	F	20E	0011	132243	52S	39S	26S	12S	ON	14N	27N	40N	54N	66N	76N	15				
1434	1	I	F	1W	0011	151610	52S	39S	26S	13S	ON	13N	27N	40N	53N	66N	76N	15				
1435	2	I	F	29W	0010	170940	53S	40S	27S	13S	ON	13N	26N	39N	52N	65N	75N	17				
1436	3	I	F	58W	0010	190305	53S	40S	27S	14S	ON	12N	26N	39N	52N	65N	75N	17				
1437	4	I	F	86W	0011	205633	54S	41S	27S	14S	1S	12N	25N	38N	52N	64N	14	15				
1438	5	I	F	115W	0011	225003	54S	42S	28S	15S	2S	12N	25N	38N	52N	64N						
1439	6	I	F	143W	0012	004337	55S	42S	28S	15S	2S	12N	25N	38N	52N							
1440	7	I	F	171W	0012	023713	54S	41S	28S	14S	1S	11N	25N	38N	51N	13	14	15				
1441	8	I	W	160E	0012	043051	54S	41S	28S	14S	1S	12N	25N	38N	52N	64N	75N	77N				
1442	9	I	W	132E	0012	062431	54S	41S	27S	14S	1S	12N	25N	39N	52N	64N	75N	15				
1443	10	I	W	104E	0012	081814	53S	40S	27S	14S	ON	12N	26N	39N	52N	65N	75N	15				
1444	11	I	W	75E	0012	101159	53S	40S	27S	13S	ON	13N	26N	40N	53N	65N	75N	15				
1445	12	I	F	47E	0012	120547	52S	39S	26S	13S	ON	13N	27N	40N	53N	66N	76N	15				
1446	13	I	F	18E	0012	135937	52S	38S	25S	12S	1N	14N	28N	41N	54N	67N	76N	15				
1447	1	I	F	10W	0012	155311	52S	39S	25S	12S	ON	14N	27N	40N	54N	66N	76N	15				
1448	2	I	F	38W	0012	174633	52S	39S	26S	13S	ON	13N	26N	40N	53N	65N	76N	15				
1449	3	I	F	67W	0012	193959	53S	40S	27S	13S	ON	13N	26N	39N	52N	65N	75N	15				
1450	4	I	F	95W	0012	213326	53S	40S	27S	14S	ON	12N	26N	39N	52N	65N	14	15				
1451	5	I	F	124W	0012	232656	53S	41S	27S	14S	1S	12N	25N	39N	52N	13	14	15				
1452	6	I	F	152W	0013	012031	54S	41S	27S	14S	1S	12N	25N	39N	52N	13	14	15				
1453	7	I	W	180W	0013	031406	54S	41S	27S	14S	1S	12N	25N	39N	52N	64N	75N	77N				
1454	8	I	W	151E	0013	050744	53S	41S	27S	14S	1S	12N	25N	39N	52N	65N	75N	76N				
1455	9	I	W	123E	0013	070124	53S	40S	27S	14S	ON	12N	26N	39N	52N	65N	75N	15				
1456	10	I	W	94E	0013	085507	53S	40S	27S	13S	ON	13N	26N	39N	53N	65N	75N	15				
1457	11	I	W	66E	0013	104852	52S	39S	26S	13S	ON	13N	27N	40N	53N	66N	76N	15				
1458	12	I	F	38E	0013	124240	52S	39S	26S	12S	ON	14N	27N	41N	54N	66N	76N	15				
1459	13	I	F	9E	0013	143631	51S	38S	25S	11S	1N	15N	28N	41N	55N	67N	76N	15				
1460	1	I	F	19W	0013	163005	51S	38S	25S	12S	1N	14N	28N	41N	54N	66N	76N	15				
1461	2	I	F	48W	0013	182327	52S	39S	26S	12S	ON	13N	27N	40N	53N	66N	76N	17				
1462	3	I	F	76W	0013	201652	52S	39S	26S	13S	ON	13N	26N	40N	53N	65N	14	15				
1463	4	I	F	104W	0013	221020	53S	40S	27S	13S	ON	13N	26N	39N	52N	65N	14	15				
1464	5	I	F	133W	0014	000350	53S	40S	27S	14S	ON	12N	26N	39N	52N	13	14	15				
1465	6	I	F	161W	0014	015723	53S	40S	27S	14S	ON	12N	26N	39N	52N	13	14	15				
1466	7	I	W	171E	0014	035058	53S	40S	27S	14S	ON	12N	26N	39N	52N	65N	75N	76N				
1467	8	I	W	142E	0014	054436	53S	40S	27S	14S	ON	12N	26N	39N	52N	65N	75N	76N				
1468	9	I	W	114E	0014	073816	53S	40S	27S	14S	1S	13N	27N	40N	53N	66N	76N					
1469	10	I	W	84E	0014	093159	53S	43S	27S	13S	ON	13N	27N	40N	53N	66N	76N					
1470	11	I	F	57E	0014	112544	52S	39S	26S	13S	ON	13N	27N	40N	53N	66N	76N	15				
1471	12	I	F	29E	0014	131932	52S	39S	25S	12S	1N	14N	28N	41N	54N	67N	76N	15				
1472	1	I	F	0W	0014	151304	52S	39S	26S	12S	ON	14N	27N	40N	53N	66N	76N	15				
1473	2	I	F	28W	0014	170626	52S	39S	26S	13S	ON	13N	26N	40N	53N	65N	76N	15				
1474	3	I	F	57W	0014	185950	53S	40S	27S	14S	ON	12N	26N	39N	52N	65N	75N	15				
1475	4	I	F	85W	0014	205316	53S	41S	27S	14S	1S	12N	25N	39N	52N	64N	14	15				
1476	5	I	F	113W	0014	224645	54S	41S	28S	14S	1S	12N	25N	38N	51N	64N	14	15				
1477	6	I	F	142W	0015	004014	54S	41S	28S	15S	1S	11N	25N	38N	51N	64N	14	15				
1478	7	I	F	170W	0015	023348	54S	41S	28S	15S	1S	11N	25N	38N	51N	13	14	15				
1479	8	I	W	161E	0015	042724	54S	41S	28S	15S	1S	11N	25N	38N	51N	64N	75N	77N				
1480	9	I	W	133E	0015	062103	54S	41S	28S	15S	1S	11N	25N	38N	51N	64N	75N	77N				
1481	10	I	W	105E	0015	081444	54S	41S	28S	14S	1S	12N	25N	39N	52N	64N	75N	15				
1482	11	I	W	76E	0015	100828	53S	40S	27S	14S	ON	12N	26N	39N	52N	65N	75N	15				
1483	12	I	F	48E	0015	120214	53S	40S	27S	13S	ON	13N	26N	40N	53N	65N	76N	15				
1484	13	I	F	19E	0015	135603	52S	39S	26S	13S	ON	13N	27N	40N	53N	66N	76N	15				
1485	1	I	W	9W	0015	154936	52S	39S	26S	13S	ON	13N	26N	40N	53N	65N	76N	76N				
1486	2	I	W	37W	0015	174259	53S	40S	27S	14S	ON	12N	26N	39N	12	13	14	15				
1487	3	I	W	66W	0015	193624	54S	41S	27S	14S	1S	12N	25N	39N	52N	64N	75N	15				
1488	4	I	W	94W	0015	212951	54S	41S	28S	15S	1S	11N	25N	39N	12	13	14	15				
1489	5	I	F	123W	0015	232321	54S	41S	28S	15S	1S	11N	25N	38N	51N	64N	14	15				
1490	6	I	W	151W	0016	011654	54S	41S	28S	15S	2S	11N	24N	38N	51N	64N	74N	77N				
1491	7	I	W	179W	0016	031029	54S	42S	28S	15S	2S	11N	24N	38N	51N	64N	74N	77N				
1492	8	I	W	152E	0016	050406	54S	41S	28S	15S	1S	11N	24N	38N	51N	64N	74N	77N				
1493	9	I	W	124E	0016	065747	54S	41S	28S	15S	1S	11N	25N	38N	12	13	14	15				
1494	10	I	W	95E	0016	085129	54S	41S	28S	14S	1S	12N	25N	39N	52N	64N	75N	77N				
1495	11	I	W	67E	0016	104501	54S	41S	28S	15S	1S	11N	25N	38N	51N	64N	74N	15				
1496	12	I	W	39E	0016	123821	55S	42S	29S	15S	2S	10N	24N	37N	50N	63N	74N	77N				
1497	13	I	W	10E	0016	143144	55S	43S	29S	16S	3S	10N	23N	37N	50N	63N	74N	77N				
1498	1	I	W	18W	0016	162509	56S	43S	30S	17S	3S	9N	23N	36N	49N	62N	73N	77N				
1499	2	I	W	47W	0016	181837	56S	43S	30S	17S	4S	9N	22N	36N	49N	62N	73N	77N				
1500	3	I	W	75W	0016	201207	57S	44S	31S	17S	4S	9N	22N	35N	12	13	14	15				
1501	4	I	F	103W	0016	220540	57S	44S	31S	17S	4S	8N	22N	35N	49N	61N	73N	77N				
1502	5	I	F	132W	0016	235915	57S	44S	31S	17S	4S	8N	22N	35N	49N	61N	73N	77N				
1503	6	I	W	160W	0017	015253	57S	44S	31S	17S	4S	9N	22N	35N	49N	62N	73N	77N				
1504	7	I	W	171E	0017	034634	56S	44S	30S	17S	4S	9N	22N	36N	49N	62N	73N	77N				
1505	8	I	W	143E	0017	054017	56S	43S	30S	17S	3S	9N	23N	36N	49N	62N	73N	77N				
1506	9	I	W	115E	0017	073402	56S	43S	30S	16S	3S	10N	23N	37N	50N	63N	74N	15				

PASS	TRACK	C	S	ALON	MODA	HRMNSE	SUB-SATELLITE POINT PICTURE LOCATION															
							LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	
1507	10	1	V	86E	0817	092750	55S	42S	29S	16S	2S	10N	24N	37N	51N	63N	74N	15				
1508	11	1	V	58E	0817	112127	55S	42S	29S	15S	2S	10N	24N	37N	50N	63N	74N	77N				
1509	12	1	V	30E	0817	131452	55S	43S	29S	16S	3S	10N	23N	37N	50N	63N	74N	77N				
1510	13	1	V	1E	0817	150820	56S	43S	30S	16S	3S	9N	23N	36N	50N	62N	73N	77N				
1511	1	1	V	27W	0817	170151	56S	43S	30S	17S	3S	9N	23N	36N	50N	62N	73N	77N				
1512	2	1	V	56W	0817	185524	56S	43S	30S	17S	3S	9N	23N	36N	12	13	14	15				
1513	3	1	V	84W	0817	204900	56S	43S	30S	17S	3S	9N	23N	11	12	13	14	15				
1514	4	1	F	112W	0817	224238	56S	43S	30S	17S	3S	9N	23N	36N	49N	62N	14	15				
1515	5	1	F	141W	0818	003619	56S	43S	30S	16S	3S	10N	23N	36N	50N	62N	14	15				
1516	6	1	V	169W	0818	023002	55S	43S	29S	16S	3S	10N	23N	37N	50N	63N	74N	77N				
1517	7	1	V	162E	0818	042348	55S	42S	29S	15S	2S	11N	24N	37N	51N	63N	74N	77N				
1518	8	1	V	134E	0818	061736	54S	41S	28S	15S	1S	11N	25N	38N	51N	64N	75N	15				
1519	9	1	V	106E	0818	081127	54S	41S	27S	14S	0N	12N	26N	39N	52N	65N	75N	15				
1520	10	1	V	77E	0818	100521	53S	40S	26S	13S	0N	13N	26N	40N	53N	66N	76N	15				
1521	11	1	V	49E	0818	115858	53S	40S	26S	14S	1S	13N	27N	40N	53N	66N	76N	77N				
1522	12	1	V	20E	0818	135220	53S	40S	27S	14S	0N	12N	25N	39N	52N	65N	75N	76N				
1523	1	1	V	8W	0818	154545	54S	41S	28S	14S	1S	11N	25N	38N	51N	64N	75N	77N				
1524	2	1	V	36W	0818	173913	54S	41S	28S	15S	1S	11N	25N	38N	51N	64N	75N	77N				
1525	3	1	V	65W	0818	193243	54S	42S	28S	15S	2S	11N	24N	38N	12	13	14	15				
1526	4	1	V	93W	0818	212615	55S	42S	29S	15S	2S	11N	24N	11	12	13	14	15				
1527	5	1	F	122W	0818	231950	55S	42S	29S	15S	2S	11N	24N	38N	51N	63N	74N	77N				
1528	6	1	F	150W	0819	011327	55S	42S	29S	15S	2S	11N	24N	38N	51N	63N	74N	77N				
1529	7	1	V	178W	0819	030707	54S	42S	28S	15S	2S	11N	24N	38N	51N	64N	75N	77N				
1530	8	1	V	153E	0819	050049	54S	41S	28S	15S	1S	11N	25N	38N	51N	64N	75N	77N				
1531	9	1	V	125E	0819	065434	54S	41S	28S	14S	1S	12N	25N	39N	52N	65N	75N	15				
1532	10	1	V	96E	0819	084822	53S	40S	27S	13S	0N	12N	26N	39N	53N	65N	75N	15				
1533	11	1	V	68E	0819	104157	53S	40S	27S	14S	0N	12N	26N	39N	52N	65N	75N	15				
1534	12	1	F	40E	0819	123519	54S	41S	28S	14S	1S	11N	25N	38N	51N	64N	75N	77N				
1535	13	1	F	11E	0819	142844	54S	41S	28S	15S	2S	11N	24N	38N	51N	64N	74N	77N				
1536	1	1	F	17W	0819	162211	55S	42S	29S	15S	2S	11N	24N	37N	51N	63N	74N	15				
1537	2	1	V	46W	0819	181541	55S	42S	29S	16S	2S	10N	24N	37N	51N	63N	74N	15				
1538	3	1	V	74W	0819	200914	55S	42S	29S	16S	2S	10N	24N	37N	12	13	14	15				
1539	4	1	F	102W	0819	220251	55S	42S	29S	16S	2S	10N	24N	37N	50N	63N	74N	77N				
1540	5	1	F	131W	0819	235628	55S	42S	29S	16S	2S	10N	24N	37N	50N	63N	74N	77N				
1541	6	1	F	159W	0820	015009	55S	42S	29S	15S	2S	11N	24N	38N	12	13	14	15				
1542	7	1	V	172E	0820	034351	55S	42S	28S	15S	2S	11N	24N	38N	51N	64N	75N	77N				
1543	8	1	V	144E	0820	053736	54S	41S	28S	15S	1S	11N	25N	38N	52N	64N	75N	77N				
1544	9	1	V	116E	0820	073124	53S	40S	27S	14S	0N	12N	26N	39N	52N	65N	75N	15				
1545	10	1	V	87E	0820	092514	53S	40S	27S	13S	0N	13N	26N	40N	53N	66N	76N	15				
1546	11	1	F	59E	0820	111850	53S	40S	27S	13S	0N	13N	26N	39N	53N	65N	75N	76N				
1547	12	1	F	30E	0820	131212	53S	41S	27S	14S	1S	12N	25N	39N	52N	64N	75N	76N				
1548	13	1	F	2E	0820	150537	54S	41S	28S	15S	1S	11N	25N	38N	51N	64N	75N	15				
1549	1	1	V	26W	0820	165905	54S	41S	28S	15S	1S	11N	24N	38N	51N	64N	75N	15				
1550	2	1	V	55W	0820	185235	55S	42S	29S	15S	2S	11N	24N	38N	12	13	14	15				
1551	3	1	V	83W	0820	204607	55S	42S	29S	15S	2S	11N	24N	37N	12	13	14	15				
1552	4	1	F	111W	0820	223944	55S	42S	29S	15S	2S	11N	24N	38N	51N	63N	74N	77N				
1553	5	1	F	140W	0821	003321	55S	42S	29S	15S	2S	11N	24N	38N	51N	63N	74N	77N				
1554	6	1	V	168W	0821	022701	54S	42S	28S	15S	2S	11N	24N	38N	51N	64N	75N	77N				
1555	7	1	V	163E	0821	042044	54S	41S	28S	15S	1S	11N	25N	38N	51N	64N	75N	77N				
1556	8	1	V	135E	0821	061429	54S	41S	27S	14S	1S	12N	25N	39N	52N	65N	75N	15				
1557	9	1	V	107E	0821	080816	53S	40S	27S	14S	0N	12N	26N	39N	53N	65N	75N	15				
1558	10	1	V	78E	0821	100206	52S	39S	26S	13S	0N	13N	27N	40N	53N	66N	76N	15				
1559	11	1	F	50E	0821	115541	52S	40S	26S	13S	0N	13N	26N	40N	53N	65N	76N	76N				
1560	12	1	F	21E	0821	134904	53S	40S	27S	14S	0N	12N	26N	39N	52N	65N	75N	76N				
1561	1	1	F	7W	0821	154229	54S	41S	28S	14S	1S	12N	25N	39N	52N	64N	75N	15				
1562	2	1	V	35W	0821	173557	54S	41S	28S	15S	1S	11N	25N	38N	52N	64N	75N	15				
1563	3	1	V	64W	0821	192927	54S	41S	28S	15S	1S	11N	25N	38N	51N	64N	75N	77N				
1564	4	1	V	92W	0821	212259	54S	42S	28S	15S	2S	11N	24N	38N	51N	64N	75N	77N				
1565	5	1	F	121W	0821	231637	54S	41S	28S	15S	1S	11N	25N	38N	51N	64N	75N	77N				
1566	6	1	F	149W	0822	011015	54S	41S	28S	15S	1S	11N	25N	38N	51N	64N	75N	77N				
1567	7	1	V	177W	0822	030355	54S	41S	28S	15S	1S	11N	25N	38N	52N	64N	75N	77N				
1568	8	1	V	154E	0822	045738	54S	41S	28S	14S	1S	12N	25N	39N	52N	65N	75N	76N				
1569	9	1	V	126E	0822	065123	53S	40S	27S	14S	0N	12N	26N	39N	52N	65N	75N	76N				
1570	10	1	V	97E	0822	084511	53S	40S	26S	13S	0N	13N	27N	40N	12	13	14	15				
1571	11	1	V	69E	0821	103901	52S	39S	26S	12S	0N	14N	27N	41N	54N	66N	76N	17				
1572	12	1	F	41E	0822	123236	52S	39S	26S	12S	0N	13N	27N	40N	53N	66N	76N	76N				
1573	13	1	F	12E	0822	142559	53S	40S	26S	13S	0N	13N	26N	40N	53N	65N	76N	76N				
1574	1	1	V	16W	0822	161924	53S	40S	27S	14S	0N	12N	26N	39N	52N	65N	75N	76N				
1575	2	1	V	45W	0822	181251	54S	41S	27S	14S	1S	12N	25N	39N	52N	65N	75N	76N				
1576	3	1	V	73W	0822	200621	54S	41S	28S	14S	1S	12N	25N	38N	12	13	14	15				
1577	4	1	F	101W	0822	215951	54S	41S	28S	15S	1S	11N	25N	38N	51N	64N	75N	77N				
1578	5	1	F	130W	0822	235326	54S	41S	28S	15S	1S	11N	25N	38N	51N	64N	75N	77N				
1579	6	1	F	158W	0823	014703	54S	41S	28S	15S	1S	11N	25N	38N	51N	64N	75N	77N				
1580	7	1	V	173E	0823	034043	54S	41S	28S	14S	1S	12N	25N	38N	52N	64N	75N	77N				
1581	8	1	V	145E	0823	053425	54S	41S	27S	14S	1S	12N	25N	39N	52N	65N	75N	76N				

PASS	TRACK	C	S	ALON	MOA	HRMSE	SUB-SATELLITE POINT PICTURE LOCATION															
							LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	
1582	9	I	W	117E	0823	072809	53S	40S	27S	14S	ON	12N	26N	39N	53N	65N	75N	15				
1583	10	I	W	88E	0823	092156	53S	40S	26S	13S	ON	13N	26N	40N	53N	66N	76N	15				
1584	11	I	F	60E	0823	111531	53S	40S	27S	13S	ON	13N	26N	40N	53N	65N	75N	76N				
1585	12	I	F	31E	0823	130853	53S	40S	27S	14S	ON	12N	25N	39N	52N	65N	75N	76N				
1586	13	I	F	3E	0823	150218	54S	41S	28S	14S	1S	11N	25N	38N	51N	64N	75N	15				
1587	1	I	W	25W	0823	165546	54S	41S	28S	15S	1S	11N	25N	38N	51N	64N	75N	77N				
1588	2	I	W	54W	0823	184916	55S	42S	28S	15S	2S	11N	24N	38N	51N	64N	75N	77N				
1589	3	I	F	02W	0823	204248	55S	42S	29S	15S	2S	11N	24N	38N	51N	63N	14	15				
1590	4	I	F	111W	0823	223626	55S	42S	29S	15S	2S	11N	24N	38N	51N	64N	74N	77N				
1591	5	I	F	139W	0824	003004	55S	42S	28S	15S	2S	11N	24N	38N	51N	64N	75N	77N				
1592	6	I	F	167W	0824	022344	54S	41S	28S	15S	1S	11N	25N	38N	12	13	14	15				
1593	7	I	W	164E	0824	041727	54S	41S	28S	14S	1S	12N	25N	38N	52N	64N	75N	77N				
1594	8	I	W	136E	0824	061113	53S	41S	27S	14S	ON	12N	26N	39N	52N	65N	75N	15				
1595	9	I	W	107E	0824	080501	53S	40S	27S	13S	ON	13N	26N	40N	53N	65N	76N	15				
1596	10	I	W	79E	0824	095035	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N	75N	15				
1597	11	I	F	51E	0824	115150	54S	41S	27S	14S	1S	12N	25N	39N	52N	64N	75N	77N				
1598	12	I	F	22E	0824	134523	54S	41S	28S	15S	1S	11N	25N	38N	51N	64N	75N	77N				
1599	1	I	F	6W	0824	153050	55S	42S	28S	15S	2S	11N	24N	38N	51N	64N	74N	77N				
1600	2	I	W	34W	0824	173220	55S	42S	29S	15S	2S	11N	24N	37N	51N	63N	74N	77N				
1601	3	I	W	63W	0824	192553	55S	42S	29S	16S	2S	10N	24N	37N	51N	63N	74N	77N				
1602	4	I	F	91W	0824	211928	55S	42S	29S	16S	2S	10N	24N	37N	51N	63N	14	15				
1603	5	I	F	120W	0824	231305	55S	42S	29S	15S	2S	10N	24N	37N	51N	63N	14	15				
1604	6	I	F	148W	0825	010644	55S	42S	29S	15S	2S	11N	24N	38N	51N	63N	14	15				
1605	7	I	W	176W	0825	030026	55S	42S	28S	15S	1S	11N	25N	38N	51N	64N	75N	77N				
1606	8	I	W	155E	0825	045411	54S	41S	28S	14S	1S	12N	25N	38N	52N	64N	75N	77N				
1607	9	I	W	127E	0825	064758	54S	41S	27S	14S	ON	12N	26N	39N	52N	65N	75N	15				
1608	10	I	W	98E	0825	084148	53S	40S	27S	13S	ON	13N	26N	40N	53N	66N	76N	15				
1609	11	I	W	69W	0825	103525	54S	41S	27S	14S	ON	13N	27N	40N	53N	66N	76N	15				
1610	12	I	F	41E	0825	122848	54S	41S	28S	14S	1S	13N	26N	39N	52N	65N	76N	77N				
1611	13	I	F	13E	0825	142214	54S	42S	29S	15S	2S	12N	26N	39N	53N	64N	76N	77N				
1612	1	I	F	16W	0825	161543	55S	42S	29S	15S	2S	12N	25N	38N	52N	64N	75N					
1613	2	I	W	44W	0828	180914	55S	43S	29S	16S	3S	12N	25N	38N								
1614	3	I	F	72W	0825	200247	55S	42S	28S	15S	2S	11N	24N	38N	51N	64N	74N	77N				
1615	4	I	F	100W	0825	215623	55S	42S	28S	15S	2S	11N	24N	38N	51N	64N	74N	77N				
1616	5	I	F	129W	0825	235007	54S	41S	28S	15S	1S	11N	25N	38N	52N	64N	14	15				
1617	6	I	F	157W	0826	014349	54S	41S	28S	14S	1S	12N	25N	39N	52N	64N	14	15				
1618	7	I	W	174E	0826	033733	53S	40S	27S	14S	ON	12N	26N	39N	52N	65N	75N	76N				
1619	8	I	W	146E	0826	053119	53S	40S	27S	13S	ON	13N	26N	40N	53N	65N	76N	76N				
1620	9	I	W	118E	0826	072508	52S	39S	26S	13S	ON	13N	27N	40N	54N	66N	76N	15				
1621	10	I	W	89E	0826	091900	52S	38S	25S	12S	1N	14N	28N	41N	54N	67N	76N	15				
1622	11	I	F	61E	0826	111236	52S	39S	25S	12S	1N	14N	27N	41N	54N	66N	76N	75N				
1623	12	I	F	32E	0826	130559	52S	39S	26S	13S	ON	13N	27N	40N	53N	66N	76N	76N				
1624	13	I	F	4E	0826	145924	53S	40S	26S	13S	ON	13N	26N	40N	53N	65N	76N	15				
1625	1	I	W	24W	0826	165251	53S	40S	27S	14S	ON	12N	26N	39N	52N	65N	75N	76N				
1626	2	I	W	53W	0826	184621	53S	40S	27S	14S	ON	12N	26N	11	12	13	14	15				
1627	3	I	F	81W	0826	203953	54S	41S	27S	14S	1S	12N	25N	39N	52N	65N	14	15				
1628	4	I	F	110W	0826	223328	54S	41S	27S	14S	1S	12N	25N	39N	52N	65N	14	15				
1629	5	I	F	138W	0827	002710	53S	40S	27S	14S	ON	12N	26N	39N	52N	65N	14	15				
1630	6	I	F	166W	0827	022050	53S	40S	27S	13S	ON	13N	26N	39N	53N	13	14	15				
1631	7	I	W	165E	0827	041433	53S	40S	26S	13S	ON	13N	26N	40N	53N	66N	76N	76N				
1632	8	I	W	137E	0827	060818	52S	39S	26S	13S	ON	13N	27N	40N	54N	66N	76N	15				
1633	9	I	W	108E	0827	080206	52S	39S	25S	12S	1N	14N	28N	41N	54N	67N	76N	15				
1634	10	I	W	80E	0827	095556	51S	38S	25S	11S	1N	15N	28N	42N	55N	67N	77N	15				
1635	11	I	F	52E	0827	114932	51S	38S	25S	11S	1N	15N	28N	41N	54N	67N	76N	75N				
1636	12	I	F	23E	0827	134254	52S	39S	25S	12S	ON	14N	27N	41N	54N	66N	76N	75N				
1637	1	I	F	5W	0827	153619	52S	39S	26S	13S	ON	13N	27N	40N	53N	66N	76N	75N				
1638	2	I	W	34W	0827	172947	53S	40S	26S	13S	ON	13N	26N	40N	53N	66N	76N	76N				
1639	3	I	W	62W	0827	192317	53S	40S	27S	13S	ON	13N	26N	40N	53N	66N	76N	76N				
1640	4	I	F	90W	0827	211649	53S	40S	27S	13S	ON	13N	26N	39N	53N	65N	14	15				
1641	5	I	F	119W	0827	231024	53S	40S	27S	13S	ON	13N	26N	39N	53N	65N	14	15				
1642	6	I	F	172W	0828	003816	9S	4N	17N	31N	43N	57N										
1643	7	I	W	150E	0828	023303	53S	40S	27S	13S	ON	13N	26N	40N	53N	65N	14	15				
1644	8	I	W	129W	0828	042753	8S	5N	18N	32N	44N	57N										
1645	9	I	W	156E	0828	064512	52S	39S	26S	13S	ON	13N	27N	40N	54N	66N	76N	76N				
1646	10	I	W	120E	0828	084513	52S	39S	26S	12S	ON	14N	27N	41N	54N	67N	76N	15				
1647	11	I	W	99E	0828	103901	51S	38S	25S	11S	1N	15N	28N	42N	55N	67N	77N	15				
1648	12	I	F	71E	0828	123235	51S	38S	25S	12S	1N	14N	28N	41N	54N	67N	76N	15				
1649	13	I	F	43E	0828	142557	52S	39S	26S	12S	ON	14N	27N	40N	54N	66N	76N	76N				
1650	1	I	F	14W	0828	161247	53S	40S	27S	13S	ON	13N	26N	40N	53N	65N	76N	76N				
1651	2	I	W	43W	0828	180616	53S	40S	27S	14S	ON	12N	26N	39N	52N	65N	75N	76N				
1652	3	I	W	71W	0828	195947	54S	41S	27S	14S	1S	12N	25N	39N	52N	65N	75N	76N				

PASS	TRACK	C	S	ALON	MODA	HRMNSL	SUD-SATELLITE POINT PICTURE LOCATION															
							LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	
1653	4	1	F	99W	0020	215321	54S	41S	20S	15N	2S	12N	26N	39N	53N	65N						
1654	5	1	F	120W	0020	234705	53S	40S	27S	14S	0N	12N	26N	39N	52N	13	14	15				
1655	6	1	F	156W	0029	014045	53S	40S	27S	13S	0N	13N	26N	40N	53N	13	14	15				
1656	7	1	W	175E	0029	033420	53S	40S	26S	13S	0N	13N	27N	40N	53N	66N	76N	76N				
1657	8	1	W	147E	0029	052013	52S	39S	26S	13S	0N	13N	27N	40N	54N	66N	76N	76N				
1658	9	1	W	119E	0029	072201	52S	39S	25S	12S	1N	14N	20N	41N	54N	67N	76N	15				
1659	10	1	W	90E	0029	091551	51S	38S	25S	11S	1N	15N	20N	42N	55N	67N	77N	15				
1660	11	1	F	62E	0029	110926	51S	38S	25S	11S	1N	15N	20N	41N	55N	67N	76N	75N				
1661	12	1	F	33E	0029	130249	52S	39S	25S	12S	0N	14N	27N	41N	54N	66N	76N	75N				
1662	13	1	F	5E	0029	145614	52S	39S	26S	13S	0N	13N	27N	40N	53N	66N	76N	15				
1663	1	1	W	23W	0029	164941	53S	40S	26S	13S	0N	13N	26N	40N	53N	66N	76N	76N				
1664	2	1	W	52W	0029	184311	53S	40S	27S	13S	0N	13N	26N	40N	53N	66N	76N	76N				
1665	3	1	F	80W	0029	203644	53S	40S	27S	13S	0N	13N	26N	39N	53N	65N	14	15				
1666	4	1	F	109W	0029	223010	53S	40S	27S	13S	0N	13N	26N	39N	53N	65N	14	15				
1667	5	1	F	137W	0030	002356	53S	40S	27S	13S	0N	13N	26N	40N	53N	65N	76N	76N				
1668	6	1	F	165W	0030	021737	53S	40S	26S	13S	0N	13N	26N	40N	53N	65N	76N	76N				
1669	7	1	W	166E	0030	041119	52S	39S	26S	13S	0N	13N	27N	40N	53N	66N	76N	76N				
1670	8	1	W	130E	0030	060505	52S	39S	26S	12S	0N	14N	27N	41N	54N	66N	76N	15				
1671	9	1	W	109E	0030	075852	51S	38S	25S	12S	1N	14N	20N	41N	55N	67N	76N	15				
1672	10	1	W	81E	0030	095227	51S	38S	25S	12S	1N	14N	20N	41N	54N	67N	76N	15				
1673	11	1	F	53E	0030	114548	52S	39S	26S	13S	0N	13N	27N	40N	53N	66N	76N	15				
1674	12	1	F	24E	0030	133912	53S	40S	27S	13S	0N	13N	26N	40N	53N	65N	76N	15				
1675	1	1	F	4W	0030	153239	53S	40S	27S	14S	0N	12N	26N	39N	52N	65N	75N	15				
1676	2	1	F	33W	0030	172608	54S	41S	27S	14S	0N	12N	26N	39N	52N	65N	75N	15				
1677	3	1	F	61W	0030	191939	54S	41S	28S	14S	1S	12N	25N	39N	52N	65N	75N	15				
1678	4	1	F	89W	0030	211313	54S	41S	28S	14S	1S	12N	25N	39N	52N	65N	14	15				
1679	5	1	F	118W	0030	230649	54S	41S	28S	14S	1S	12N	25N	39N	52N	65N	14	15				
1680	6	1	F	146W	0031	010034	53S	40S	27S	14S	0N	12N	26N	39N	52N	65N	14	15				
1681	7	1	F	175W	0031	025416	53S	40S	27S	13S	0N	13N	26N	40N	12	13	14	15				
1682	8	1	W	157E	0031	044801	53S	40S	26S	13S	0N	13N	27N	40N	53N	66N	76N	76N				
1683	9	1	W	129E	0031	064148	52S	39S	26S	12S	0N	14N	27N	41N	54N	66N	76N	75N				
1684	10	1	W	100E	0031	083537	51S	38S	25S	12S	1N	14N	20N	41N	55N	67N	77N	15				
1685	11	1	W	72E	0031	102912	51S	38S	25S	12S	1N	14N	20N	41N	54N	67N	76N	15				
1686	12	1	F	44E	0031	122234	52S	39S	26S	13S	0N	13N	27N	40N	53N	66N	76N	15				
1687	13	1	F	15E	0031	141558	53S	40S	27S	13S	0N	13N	26N	40N	53N	65N	76N	15				
1688	1	1	F	13W	0031	160924	53S	40S	27S	14S	0N	12N	26N	39N	52N	65N	75N	15				
1689	2	1	F	42W	0031	180253	54S	41S	27S	14S	0N	12N	26N	39N	52N	65N	75N	15				
1690	3	1	F	70W	0031	195624	54S	41S	28S	14S	1S	12N	25N	39N	52N	65N	14	15				
1691	4	1	F	98W	0031	214958	54S	41S	28S	14S	1S	12N	25N	39N	52N	65N	14	15				
1692	5	1	F	127W	0031	234333	54S	41S	28S	14S	1S	12N	25N	39N	52N	13	14	15				
1693	6	1	F	155W	0901	013712	54S	41S	28S	14S	1S	12N	25N	39N	52N	13	14	15				
1694	7	1	W	176E	0901	033053	53S	41S	27S	14S	0N	12N	26N	39N	52N	65N	75N	76N				
1695	8	1	W	140E	0901	052436	53S	40S	27S	13S	0N	13N	26N	40N	53N	65N	76N	76N				
1696	9	1	W	120E	0901	071822	53S	40S	26S	13S	0N	13N	27N	40N	53N	66N	76N	15				
1697	10	1	W	91E	0901	091211	52S	39S	26S	12S	0N	14N	27N	41N	54N	67N	76N	15				
1698	11	1	F	63E	0901	110545	52S	39S	26S	12S	0N	14N	27N	40N	54N	66N	76N	76N				
1699	12	1	F	34E	0901	125906	53S	40S	27S	13S	0N	13N	26N	40N	53N	65N	76N	76N				
1700	13	1	F	6E	0901	145230	53S	40S	27S	14S	0N	12N	26N	39N	52N	65N	75N	15				
1701	1	1	F	22W	0901	164557	54S	41S	28S	14S	1S	12N	25N	39N	52N	65N	75N	15				
1702	2	1	F	51W	0901	183926	54S	41S	28S	15S	1S	11N	25N	38N	52N	64N	75N	15				
1703	3	1	F	79W	0901	203257	54S	41S	28S	15S	1S	11N	25N	38N	51N	64N	14	15				
1704	4	1	F	108W	0901	222631	54S	42S	28S	15S	1S	11N	25N	38N	51N	64N	75N	77N				
1705	5	1	F	136W	0902	002012	54S	41S	28S	15S	1S	11N	25N	38N	52N	64N	75N	77N				
1706	6	1	F	164W	0902	021351	54S	41S	28S	14S	1S	12N	25N	39N	52N	13	14	15				
1707	7	1	W	167E	0902	040733	54S	41S	28S	14S	1S	12N	26N	39N	52N	65N	75N	76N				
1708	8	1	W	139E	0902	060118	53S	40S	27S	14S	0N	12N	26N	39N	53N	65N	76N	76N				
1709	9	1	W	110E	0902	075505	53S	40S	26S	13S	0N	13N	27N	40N	53N	66N	76N	76N				
1710	10	1	W	82E	0902	094854	52S	39S	26S	12S	0N	14N	27N	41N	54N	66N	76N	15				
1711	11	1	F	54E	0902	114230	52S	39S	26S	12S	0N	14N	27N	40N	54N	66N	76N	15				
1712	12	1	F	25E	0902	133552	53S	40S	27S	13S	0N	13N	26N	40N	53N	65N	76N	15				
1713	1	1	F	3W	0902	152917	53S	40S	27S	14S	0N	12N	26N	39N	52N	65N	75N	15				
1714	2	1	F	32W	0902	172245	54S	41S	27S	14S	1S	12N	25N	39N	52N	65N	75N	15				
1715	3	1	F	60W	0902	191615	54S	41S	28S	14S	1S	12N	25N	39N	52N	64N	75N	15				
1716	4	1	F	88W	0902	210947	54S	41S	28S	15S	1S	11N	25N	38N	52N	13	14	15				
1717	5	1	F	117W	0902	230322	54S	41S	28S	15S	1S	11N	25N	38N	52N	64N	14	15				
1718	6	1	F	145W	0903	005701	54S	41S	28S	14S	1S	12N	25N	39N	52N	64N	14	15				
1719	7	1	W	174W	0903	025041	54S	41S	28S	14S	1S	12N	25N	39N	52N	65N	75N	76N				
1720	8	1	W	158E	0903	044423	54S	41S	27S	14S	0N	12N	26N	39N	52N	65N	75N	76N				
1721	9	1	W	130E	0903	063809	53S	40S	27S	13S	0N	13N	26N	40N	53N	66N	76N	15				
1722	10	1	W	101E	0903	083156	52S	39S	26S	13S	0N	13N	27N	40N	54N	66N	76N	15				
1723	11	1	W	73E	0903	102531	53S	40S	26S	13S	0N	13N	27N	40N	53N	66N	76N	15				
1724	12	1	F	44E	0903	121853	53S	40S	27S	14S	0N	12N	26N	39N	52N	65N	75N	15	</			

PASS	TRACK	C	S	ALON	MODA	HRMNSE	SUB-SATELLITE POINT PICTURE LOCATION															
							LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT
1720	3	1	F	69W	0903	195245	55S	42S	29S	15S	2S	11N	24N	38N	51N	64N	75N	15				
1729	4	1	F	97W	0903	214620	55S	42S	29S	15S	2S	11N	24N	38N	51N	64N	14	15				
1730	5	1	F	126W	0903	233957	55S	42S	29S	15S	2S	11N	24N	38N	51N	13	14	15				
1731	6	1	F	154W	0904	013336	55S	42S	20S	15S	1S	11N	25N	38N	51N	13	14	15				
1732	7	1	W	177E	0904	032719	54S	41S	20S	15S	1S	12N	25N	39N	52N	64N	75N	76N				
1733	8	1	W	149E	0904	052103	54S	41S	20S	14S	1S	12N	26N	39N	52N	65N	75N	76N				
1734	9	1	W	121E	0904	071450	53S	40S	27S	13S	0N	13N	26N	40N	53N	65N	76N	15				
1735	10	1	W	92E	0904	090040	53S	39S	26S	13S	0N	13N	27N	40N	54N	66N	76N	15				
1736	11	1	F	64E	0904	110216	53S	40S	26S	13S	0N	13N	27N	40N	53N	66N	76N	15				
1737	12	1	F	35E	0904	125538	53S	40S	27S	14S	0N	12N	26N	39N	53N	65N	75N	15				
1738	13	1	F	7E	0904	144903	54S	41S	20S	14S	1S	12N	25N	39N	52N	65N	75N	15				
1739	1	1	F	21W	0904	164230	54S	41S	20S	15S	1S	11N	25N	38N	52N	64N	75N	15				
1740	2	1	F	50W	0904	183600	54S	42S	20S	15S	1S	11N	25N	38N	51N	64N	75N	15				
1741	3	1	F	78W	0904	202933	55S	42S	20S	15S	1S	11N	25N	38N	51N	64N	14	15				
1742	4	1	F	107W	0904	222308	55S	42S	20S	15S	2S	11N	25N	38N	51N	64N	14	15				
1743	5	1	F	135W	0905	001644	55S	42S	20S	15S	1S	11N	25N	38N	51N	13	14	15				
1744	6	1	F	163W	0905	021024	54S	41S	20S	15S	1S	11N	25N	38N	52N	13	14	15				
1745	7	1	W	168E	0905	040407	54S	41S	20S	14S	1S	12N	25N	39N	52N	65N	75N	76N				
1746	8	1	W	140E	0905	055752	54S	41S	27S	14S	0N	12N	26N	39N	52N	65N	75N	76N				
1747	9	1	W	111E	0905	075139	53S	40S	27S	13S	0N	13N	26N	40N	53N	66N	76N	15				
1748	10	2	W	83E	0905	094529	52S	39S	26S	13S	0N	14N	27N	41N	54N	66N	76N	15				
1749	11	2	F	55E	0905	113904	52S	39S	26S	13S	0N	13N	27N	40N	53N	66N	76N	15				
1750	12	2	F	26E	0905	133226	53S	40S	27S	13S	0N	13N	26N	39N	53N	65N	76N	15				
1751	1	2	F	2W	0905	152550	54S	41S	27S	14S	1S	12N	25N	39N	52N	65N	75N	15				
1752	2	2	F	31W	0905	171914	54S	41S	20S	15S	1S	11N	25N	38N	52N	64N	75N	15				
1753	3	2	F	59W	0905	191245	54S	42S	20S	15S	1S	11N	25N	38N	51N	64N	75N	15				
1754	4	2	F	87W	0905	210617	55S	42S	20S	15S	2S	11N	25N	38N	51N	64N	19	20				
1755	5	2	F	116W	0905	225951	55S	42S	29S	15S	2S	11N	24N	38N	51N	64N	14	15				
1756	6	2	F	144W	0906	005334	54S	41S	20S	15S	1S	11N	25N	38N	52N	64N	14	15				
1757	7	2	W	173W	0906	024715	54S	41S	20S	14S	1S	12N	25N	39N	52N	65N	75N	76N				
1758	8	2	W	159E	0906	044058	54S	41S	27S	14S	1S	12N	26N	39N	52N	65N	75N	76N				
1759	9	2	W	131E	0906	063444	53S	40S	27S	14S	0N	13N	26N	40N	53N	65N	76N	15				
1760	10	2	W	102E	0906	082832	53S	40S	26S	13S	0N	13N	27N	40N	53N	66N	76N	15				
1761	11	2	W	74E	0906	102207	53S	40S	26S	13S	0N	13N	26N	40N	53N	66N	76N	15				
1762	12	2	F	45E	0906	121529	53S	40S	27S	14S	0N	12N	26N	39N	52N	65N	75N	15				
1763	13	2	F	17E	0906	140853	54S	41S	20S	14S	1S	12N	25N	39N	52N	64N	75N	15				
1764	1	2	F	11W	0906	160220	54S	41S	20S	15S	1S	11N	25N	38N	51N	64N	75N	15				
1765	2	2	F	40W	0906	175550	55S	42S	20S	15S	2S	11N	24N	38N	51N	64N	75N	15				
1766	3	2	F	68W	0906	194922	55S	42S	29S	15S	2S	11N	24N	38N	51N	64N	14	15				
1767	4	2	F	97W	0906	214257	55S	42S	29S	15S	2S	11N	24N	38N	51N	64N	14	15				
1768	5	2	F	125W	0906	233634	55S	42S	29S	15S	2S	11N	24N	38N	51N	64N	16	17				
1769	6	2	F	153W	0907	013014	55S	42S	20S	15S	1S	11N	25N	38N	51N	13	14	15				
1770	7	2	W	178E	0907	032357	54S	41S	20S	15S	1S	12N	25N	39N	52N	64N	75N	76N				
1771	8	2	W	150E	0907	051742	54S	41S	20S	14S	1S	12N	26N	39N	52N	65N	75N	76N				
1772	9	2	W	122E	0907	071129	53S	40S	27S	13S	0N	13N	26N	40N	53N	65N	76N	15				
1773	10	2	W	93E	0907	090519	53S	40S	26S	13S	0N	13N	27N	40N	54N	66N	76N	15				
1774	11	2	F	65E	0907	105855	53S	40S	26S	13S	0N	13N	27N	40N	53N	66N	76N	15				
1775	12	2	F	36E	0907	125217	53S	40S	27S	14S	0N	12N	26N	39N	53N	65N	75N	15				
1776	13	2	F	8E	0907	144541	54S	41S	20S	14S	1S	12N	25N	39N	52N	65N	75N	15				
1777	1	2	F	20W	0907	163908	54S	41S	20S	15S	1S	11N	25N	38N	52N	64N	75N	15				
1778	2	2	F	49W	0907	183238	55S	42S	20S	15S	1S	11N	25N	38N	51N	64N	75N	15				
1779	3	2	F	77W	0907	202610	55S	42S	29S	15S	2S	11N	24N	38N	51N	64N	14	15				
1780	4	2	F	106W	0907	221944	55S	42S	29S	14S	2S	12N	25N	39N	52N	64N						
1781	5	2	F	134W	0908	001321	55S	42S	29S	15S	2S	11N	25N	38N	51N	64N	14	15				
1782	6	2	F	162W	0908	020701	55S	42S	20S	15S	1S	11N	25N	38N	51N							
1783	7	2	W	169E	0908	040044	54S	41S	20S	14S	1S	12N	25N	39N	52N	65N	75N	76N				
1784	8	2	W	141E	0908	055429	54S	41S	27S	14S	0N	12N	26N	39N	52N	65N	75N	76N				
1785	9	2	W	112E	0908	074816	53S	40S	27S	13S	0N	13N	26N	40N	53N	66N	76N	15				
1786	10	2	W	84E	0908	094150	53S	40S	27S	14S	0N	12N	26N	39N	52N	65N	75N	15				
1787	11	1	F	56E	0908	113513	54S	41S	20S	14S	1S	12N	25N	39N	52N	65N	75N	76N				
1788	12	1	F	27E	0908	132838	54S	41S	20S	15S	1S	11N	25N	38N	51N	64N	75N	76N				
1789	1	1	F	1W	0908	152206	55S	42S	29S	15S	2S	11N	24N	38N	51N	64N	75N	15				
1790	2	1	F	30W	0908	171536	55S	42S	29S	16S	2S	11N	24N	38N	51N	64N	74N	15				
1791	3	1	F	58W	0908	190908	55S	42S	29S	16S	2S	10N	24N	37N	51N	63N	74N	15				
1792	4	1	F	86W	0908	210243	55S	42S	29S	16S	2S	10N	24N	37N	51N	63N	14	15				
1793	5	1	F	115W	0908	225621	55S	42S	29S	16S	2S	10N	24N	38N	51N	64N	14	15				
1794	6	1	F	143W	0909	004959	55S	42S	29S	15S	2S	11N	24N	38N	51N	64N	14	15				
1795	7	1	F	172W	0909	024343	55S	42S	20S	15S	1S	11N	25N	38N	51N	13	14	15				
1796	8	1	W	160E	0909	043728	54S	41S	20S	15S	1S	12N	25N	39N	52N	65N	75N	76N				
1797	9	1	W	132E	0909	063116	54S	41S	27S	14S	0N	12N	26N	39N	53N	65N	76N	76N				
1798	10	1	W	103E	0909	082507																

PASS	TRACK	C	S	ALON	MODA	HRMNSE	SUB-SATELLITE POINT PICTURE LOCATION											
							LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT
1803	2	I	F	39W	0909	175229	55S	42S	29S	15S	2S	11N	25N	30N	51N	64N	75N	15
1804	3	I	F	67W	0909	194601	55S	42S	29S	15S	2S	11N	24N	30N	51N	64N	75N	15
1805	4	I	F	96W	0909	213936	55S	42S	29S	15S	2S	11N	24N	30N	51N	64N	14	15
1806	5	I	F	124W	0909	233319	55S	42S	20S	15S	1S	11N	25N	30N	51N	64N	14	15
1807	6	I	F	152W	0910	012700	54S	41S	20S	15S	1S	11N	25N	39N	52N	64N	14	15
1808	7	I	W	179E	0910	032043	54S	41S	20S	14S	1S	12N	25N	39N	52N	65N	75N	76N
1809	8	I	W	151E	0910	051429	53S	40S	27S	14S	ON	12N	26N	39N	53N	65N	76N	76N
1810	9	I	W	122E	0910	070817	53S	40S	27S	13S	ON	13N	27N	40N	53N	66N	76N	15
1811	10	I	W	94E	0910	090200	52S	39S	26S	12S	ON	14N	28N	41N	54N	67N	76N	15
1812	11	I	W	66E	0910	105545	52S	39S	26S	12S	ON	14N	27N	41N	54N	66N	76N	15
1813	12	I	F	37E	0910	124907	53S	40S	26S	13S	ON	13N	27N	40N	53N	66N	76N	15
1814	13	I	F	9E	0910	144232	53S	40S	27S	14S	ON	12N	26N	39N	53N	65N	75N	15
1815	1	I	F	19W	0910	163500	57S	44S	31S	17S	4S	9N	22N	36N	49N	62N	73N	15
1816	2	I	F	48W	0910	182929	54S	41S	28S	14S	1S	12N	25N	39N	52N	65N	75N	15
1817	3	I	F	76W	0910	202302	54S	41S	20S	14S	1S	12N	25N	39N	52N	65N	14	15
1818	4	I	F	105W	0910	221637	54S	41S	20S	14S	1S	12N	25N	39N	52N	65N	14	15
1819	5	I	F	133W	0911	001019	54S	41S	28S	14S	1S	12N	26N	39N	52N	13	14	15
1820	6	I	F	161W	0911	020400	54S	41S	27S	14S	ON	12N	26N	39N	53N	13	14	15
1821	7	I	W	170E	0911	035744	53S	40S	27S	13S	ON	13N	26N	40N	53N	66N	76N	76N
1822	8	I	W	142E	0911	055129	53S	40S	26S	13S	ON	13N	27N	40N	53N	66N	76N	76N
1823	9	I	W	113E	0911	074517	52S	39S	26S	12S	ON	14N	27N	41N	54N	67N	76N	15
1824	10	I	W	85E	0911	093900	51S	38S	25S	11S	1N	15N	28N	42N	55N	67N	77N	15
1825	11	I	F	57E	0911	113243	51S	38S	25S	12S	1N	14N	28N	41N	54N	67N	76N	15
1826	12	I	F	28E	0911	132605	52S	39S	26S	12S	ON	14N	27N	41N	54N	66N	76N	15
1827	1	I	F	0W	0911	151929	53S	40S	26S	13S	ON	13N	27N	40N	53N	66N	76N	15
1828	2	I	F	29W	0911	171255	53S	40S	27S	13S	ON	13N	26N	40N	53N	65N	76N	15
1829	3	I	F	57W	0911	190624	54S	41S	27S	14S	ON	12N	26N	39N	52N	65N	75N	15
1830	4	I	F	85W	0911	205956	54S	41S	27S	14S	ON	12N	26N	39N	52N	65N	14	15
1831	5	I	F	114W	0911	225330	54S	42S	28S	14S	1S	12N	26N	39N	53N	66N		
1832	6	I	F	143W	0912	004710	54S	42S	28S	14S	1S	12N	27N	40	54N			
1833	7	I	F	171W	0912	024049	54S	42S	28S	14S	1S	13N	26N	40N	53N			
1834	8	I	W	161E	0912	043431	53S	40S	27S	13S	ON	13N	26N	40N	53N	66N	76N	76N
1835	9	I	W	133E	0912	062815	53S	40S	26S	13S	ON	13N	27N	40N	54N	66N	76N	15
1836	10	I	W	104E	0912	082202	52S	39S	26S	12S	ON	14N	27N	41N	54N	67N	76N	15
1837	11	I	W	76E	0912	101536	52S	39S	26S	13S	ON	14N	27N	40N	54N	66N	76N	15
1838	12	I	F	47E	0912	120859	53S	40S	27S	13S	ON	13N	26N	40N	53N	66N	76N	15
1839	13	I	F	19E	0912	140224	53S	40S	27S	14S	ON	12N	26N	39N	53N	65N	75N	15
1840	1	I	F	9W	0912	155551	54S	41S	28S	14S	1S	12N	25N	39N	52N	65N	75N	15
1841	2	I	F	38W	0912	174921	54S	41S	28S	14S	1S	12N	25N	39N	52N	65N	14	15
1842	3	I	F	66W	0912	194254	54S	41S	28S	15S	1S	12N	25N	39N	52N	64N	14	15
1843	4	I	F	95W	0912	213629	54S	41S	28S	15S	1S	12N	25N	39N	52N	65N	14	15
1844	5	I	F	123W	0912	233006	54S	41S	28S	15S	1S	12N	25N	39N	52N	13	14	15
1845	6	I	F	151W	0913	012348	54S	41S	28S	14S	1S	12N	26N	39N	52N	13	14	15
1846	7	I	W	180W	0913	031732	54S	41S	27S	14S	ON	12N	26N	39N	53N	65N	76N	76N
1847	8	I	W	152E	0913	051117	53S	40S	27S	13S	ON	13N	27N	40N	53N	66N	76N	76N
1848	9	I	W	123E	0913	070506	52S	39S	26S	13S	ON	14N	27N	41N	54N	66N	76N	15
1849	10	I	W	95E	0913	085856	52S	39S	25S	12S	1N	14N	28N	41N	55N	67N	77N	15
1850	11	I	W	67E	0913	105232	52S	39S	25S	12S	1N	14N	28N	41N	54N	67N	76N	15
1851	12	I	F	38E	0913	124555	52S	39S	26S	13S	ON	13N	27N	40N	54N	66N	76N	15
1852	13	I	F	10E	0913	143920	53S	40S	27S	13S	ON	13N	26N	40N	53N	66N	76N	15
1853	1	I	F	19W	0913	163247	53S	40S	27S	14S	ON	13N	26N	40N	53N	65N	76N	15
1854	2	I	F	47W	0913	182617	54S	41S	27S	14S	ON	12N	26N	39N	52N	65N	75N	15
1855	3	I	F	75W	0913	201950	54S	41S	27S	14S	ON	12N	26N	39N	52N	65N	14	15
1856	4	I	F	104W	0913	221325	54S	41S	27S	14S	ON	12N	26N	39N	52N	65N	14	15
1857	5	I	F	132W	0914	000700	54S	41S	27S	14S	ON	12N	26N	39N	52N	13	14	15
1858	6	I	F	160W	0914	020040	54S	41S	27S	14S	ON	12N	26N	39N	53N	13	14	15
1859	7	I	W	171E	0914	035422	53S	40S	27S	13S	ON	13N	26N	40N	53N	66N	76N	76N
1860	8	I	W	143E	0914	054807	53S	40S	26S	13S	ON	13N	27N	40N	53N	66N	76N	76N
1861	9	I	W	114E	0914	074154	52S	39S	26S	12S	ON	14N	27N	41N	54N	67N	76N	15
1862	10	I	W	86E	0914	093544	52S	38S	25S	12S	1N	15N	28N	42N	55N	67N	77N	15
1863	11	I	F	58E	0914	112920	52S	39S	25S	12S	1N	14N	28N	41N	54N	67N	76N	75N
1864	12	I	F	29E	0914	132241	52S	39S	26S	13S	ON	14N	27N	41N	54N	66N	76N	75N
1865	13	I	F	1E	0914	151606	53S	40S	27S	13S	ON	13N	27N	40N	53N	66N	76N	15
1866	1	I	F	28W	0914	170933	53S	40S	27S	14S	ON	13N	26N	40N	53N	65N	76N	15
1867	2	I	F	56W	0914	190302	54S	41S	27S	14S	ON	12N	26N	39N	52N	65N	75N	15
1868	3	I	F	84W	0914	205634	54S	41S	28S	14S	1S	12N	26N	39N	52N	65N	14	15
1869	4	I	F	113W	0914	225009	54S	42S	28S	14S	1S	13N	27N	40N	53N	66N		
1870	5	I	F	142W	0915	004342	54S	42S	28S	15S	1S	13N	26N	39N	53N			
1871	6	I	W	170W	0915	023721	54S	41S	27S	14S	ON	12N	26N	39N	52N	65N	75N	76N
1872	7	I	W	162E	0915	043103	54S	40S	27S	14S	ON	12N	26N	40N	53N	65N	76N	76N
1873	8	I	W	134E	0915	062440	53S	40S	27S	13S	ON	13N	27N	40N	53N	66N	76N	15
4369	10	I	W	77E	0915	074026	64S	52S	39S	26S	13S	ON	13N	26N	39N	52N	65N	75N
1874	9	I	W	105E	0915	081034	53S	39S	26S	13S	ON	14N	27N	41N	54N	66N	76N	75N
4370	11	I	F	49E	0915	094249	65S	53S	40S	27S	14S	ON	12N	25N	38N	51N	64N	75N
1875	10	I	W	77E	0915	101224	52S	39S	25S	12S	1N	14N	28N	41N	55N	67N	77N	75N

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PASS	TRACK	C	S	ALON	MODA	HRMSE	SUB-SATELLITE POINT PICTURE LOCATION															
							LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	
4446	12	1	F	30E	0921	105709	62S	50S	37S	25S	11S	2N	15N	29N	42N	55N	67N	77N				
4447	13	1	F	1E	0921	125120	63S	51S	38S	25S	12S	1N	14N	28N	41N	54N	67N	77N				
4448	1	1	F	27W	0921	144552	64S	51S	38S	25S	12S	ON	13N	27N	40N	53N	66N	76N				
4449	2	1	F	56W	0921	164020	64S	52S	39S	26S	13S	ON	13N	26N	40N	53N	65N	76N				
4450	3	1	F	05W	0921	103457	64S	52S	39S	26S	13S	ON	13N	26N	39N	53N	65N	76N				
4451							NO PICTURES RECEIVED															
4452	5	1	F	142W	0921	222402	65S	52S	40S	27S	13S	ON	12N	26N	39N	52N	65N	15				
4453	6	1	W	171W	0922	001039	65S	53S	40S	27S	13S	ON	12N	26N	39N	52N	65N	75N				
4454	7	1	W	161E	0922	021322	65S	52S	39S	26S	13S	ON	13N	26N	39N	52N	65N	76N				
4455	8	1	W	132E	0922	040000	64S	52S	39S	26S	13S	ON	13N	26N	40N	53N	65N	76N				
4456	9	1	W	103E	0922	060257	64S	51S	39S	25S	12S	ON	13N	27N	40N	53N	66N	76N				
4457	10	1	W	75E	0922	075734	64S	52S	39S	26S	13S	ON	13N	26N	40N	53N	65N	76N				
4458	11	1	F	46E	0922	095157	65S	52S	40S	26S	13S	ON	12N	26N	39N	52N	64N	75N				
4459	12	1	F	17E	0922	114623	65S	53S	40S	27S	14S	1S	12N	25N	38N	51N	64N	75N				
4460	1	1	F	11W	0922	134052	66S	54S	41S	20S	14S	1S	11N	24N	38N	51N	64N	75N				
4461	2	1	F	40W	0922	153524	66S	54S	41S	20S	15S	1S	11N	24N	37N	51N	63N	74N				
4462	3	1	F	69W	0922	172959	66S	54S	41S	20S	15S	2S	11N	24N	37N	50N	63N	74N				
4463	4	1	F	97W	0922	192430	66S	54S	41S	20S	15S	2S	11N	24N	37N	50N	63N	74N				
4464	5	1	F	126W	0922	211920	66S	54S	41S	20S	15S	1S	11N	24N	38N	51N	63N	75N				
4465	6	1	F	155W	0922	231405	66S	54S	41S	20S	14S	1S	11N	25N	38N	51N	64N	15				
4466	7	1	W	177E	0923	010854	65S	53S	40S	27S	14S	1S	12N	25N	38N	52N	64N	75N				
4467	8	1	W	148E	0923	030346	65S	52S	40S	26S	13S	ON	13N	26N	39N	52N	65N	76N				
4468	9	1	W	119E	0923	045041	64S	52S	39S	26S	12S	ON	13N	27N	40N	53N	66N	76N				
4469	10	1	W	91E	0923	065339	63S	51S	38S	25S	11S	1N	14N	28N	41N	54N	67N	77N				
4470	11	1	F	62E	0923	084819	63S	51S	38S	25S	12S	1N	14N	27N	41N	54N	66N	76N				
4471	12	1	F	33E	0923	104242	64S	51S	39S	26S	12S	ON	13N	27N	40N	53N	65N	76N				
4472	13	1	F	5E	0923	123708	64S	52S	39S	26S	13S	ON	13N	26N	39N	52N	65N	76N				
4473	1	1	F	24W	0923	143137	65S	53S	40S	27S	13S	ON	12N	25N	39N	52N	64N	75N				
4474	2	1	F	53W	0923	162609	65S	53S	40S	27S	14S	ON	12N	25N	38N	52N	64N	75N				
4475	3	1	F	81W	0923	182045	65S	53S	40S	27S	14S	1S	12N	25N	38N	51N	64N	75N				
4476	4	1	F	110W	0923	201523	65S	53S	40S	27S	14S	1S	12N	25N	38N	51N	64N	75N				
4477	5	1	F	139W	0923	221005	65S	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N	15				
4478	6	1	F	167W	0924	000456	65S	52S	39S	26S	13S	ON	13N	26N	39N	52N	65N	15				
4479	7	1	W	164E	0924	015944	64S	52S	39S	26S	13S	ON	13N	26N	40N	53N	65N	76N				
4480	8	1	W	135E	0924	035436	64S	51S	38S	25S	12S	ON	14N	27N	40N	54N	66N	76N				
4481	9	1	W	107E	0924	054930	63S	50S	38S	24S	11S	1N	15N	28N	41N	54N	67N	77N				
4482	10	1	W	78E	0924	074409	63S	51S	38S	25S	11S	1N	14N	28N	41N	54N	66N	77N				
4483	11	1	F	49E	0924	093832	64S	51S	38S	25S	12S	ON	13N	27N	40N	53N	66N	76N				
4484	12	1	F	21E	0924	113258	64S	52S	39S	26S	13S	ON	13N	26N	39N	52N	65N	76N				
4485	1	1	F	8W	0924	132727	65S	52S	40S	26S	13S	ON	12N	26N	39N	52N	65N	75N				
4486	2	1	F	37W	0924	152159	65S	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N	75N				
4487	3	1	F	65W	0924	171635	65S	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N	75N				
4488	4	1	F	94W	0924	191113	65S	53S	40S	27S	14S	ON	12N	25N	39N	52N	64N	75N				
4489	5	1	F	123W	0924	210555	65S	53S	40S	27S	14S	ON	12N	25N	39N	52N	65N	75N				
4490	6	1	F	151W	0924	230040	65S	52S	40S	26S	13S	ON	12N	26N	39N	52N	65N	15				
4491	7	1	W	180W	0925	005525	65S	52S	39S	26S	13S	ON	13N	26N	39N	53N	65N	76N				
4492	8	1	W	151E	0925	025016	64S	52S	39S	25S	12S	ON	13N	27N	40N	53N	66N	76N				
4493	9	1	W	123E	0925	044510	63S	51S	38S	25S	11S	1N	14N	28N	41N	54N	67N	77N				
4494	10	1	W	94E	0925	064007	62S	50S	37S	24S	10S	2N	15N	29N	42N	55N	67N	77N				
4495	11	1	F	65E	0925	083447	62S	50S	37S	24S	11S	2N	15N	28N	41N	54N	67N	77N				
4496	12	1	F	37E	0925	102908	63S	51S	38S	25S	12S	1N	14N	27N	41N	54N	66N	76N				
4497	13	1	F	8E	0925	122332	64S	51S	39S	26S	12S	ON	13N	27N	40N	53N	65N	76N				
4498	1	1	F	21W	0925	141800	64S	52S	39S	26S	12S	ON	13N	26N	40N	53N	65N	76N				
4499	2	1	F	49W	0925	161240	64S	52S	39S	26S	13S	ON	13N	26N	39N	53N	65N	76N				
4500	3	1	F	78W	0925	180714	65S	52S	39S	26S	13S	ON	13N	26N	39N	52N	65N	76N				
4501	4	1	F	107W	0925	200152	65S	52S	39S	26S	13S	ON	13N	26N	39N	52N	65N	15				
4502	5	1	F	135W	0925	215633	65S	52S	39S	26S	13S	ON	13N	26N	39N	53N	65N	15				
4503	6	1	F	164W	0925	235117	64S	52S	39S	26S	13S	ON	13N	26N	36N	40N	53N	65N	15			
4504	7	1	W	167E	0926	014605	64S	51S	38S	25S	12S	ON	14N	27N	40N	53N	66N	76N				
4505	8	1	W	139E	0926	034056	63S	51S	38S	25S	11S	1N	14N	28N	41N	54N	67N	77N				
4506	9	1	W	110E	0926	053550	63S	50S	37S	24S	11S	2N	15N	28N	42N	55N	67N	77N				
4507	10	1	W	81E	0926	073047	62S	49S	36S	23S	10S	3N	16N	29N	43N	56N	68N	78N				
4508	11	1	F	53E	0926	092526	62S	49S	36S	24S	11S	3N	16N	29N	42N	55N	67N	77N				
4509	12	1	F	24E	0926	111940	63S	50S	37S	24S	11S	1N	15N	28N	41N	54N	67N	77N				
4510	1	1	F	5W	0926	131413	63S	51S	38S	25S	12S	1N	14N	27N	41N	54N	66N	77N				
2017	13	1	W	5E	0926	151801	6S	7N	20N	34N	47N	60N	10	11	12	13	14	15				
2018	1	1	W	24W	0926	171120	6S	6N	20N	33N												
2019	2	1	F	52W	0926	190454	7S	6N	19N	33N	46N	59N	10	11	12	13	14	15				
4514	5	2	F	119W	0926	205225	64S	52S	39S	26S	13S	ON	13N	26N	40N	53N	65N	15				
2020	3	1	F	81W	0926	205026	7S	6N	19N	33N	46N	59N	10	11	12	13	14	15				
4515	6	2	F	140W	0926	224706	64S	52S	39S	26S	12S	ON	13N	27N	40N	53N	66N	15				
2021	4	1	F	109W	0926	225201	7S	6N	19N	33N	46N	59N	10	11	12	13	14	15				
4516	7	2	W	177W	0927	004142	64S	52S	39S	26S	13S	ON	13N	26N	40N	53N	65N	76N				
2022	5	1	F	137W	0927	004530	7S	6N	19N	33N	46N	59N										
4517	8	2	W	155E	0927	023629	64S	51S	39S	25S	12S	ON	14N	27N	40N	53N	66N	76N				

PASS	TRACK	C	S	ALON	MODA	HRMNSE	SUB-SATELLITE POINT PICTURE LOCATION															
							LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	
4518	9	2	W	126E	0927	043118	63S	51S	38S	25S	12S	1N	14N	27N	41N	54N	66N	77N				
4519	10	2	W	98E	0927	062611	63S	50S	37S	24S	11S	1N	15N	28N	42N	55N	67N	77N				
4520	11	2	F	69E	0927	082107	62S	49S	36S	23S	10S	2N	16N	29N	42N	56N	68N	77N				
4521	12	2	F	40E	0927	101544	62S	50S	37S	24S	10S	2N	15N	29N	42N	55N	67N	77N				
4522	13	2	F	12E	0927	121003	63S	51S	38S	25S	11S	1N	14N	28N	41N	54N	66N	77N				
4523	1	2	F	17W	0927	140426	64S	51S	38S	25S	12S	0N	13N	27N	40N	53N	66N	76N				
4524	2	2	F	46W	0927	155052	64S	52S	39S	26S	13S	0N	13N	26N	39N	53N	65N	76N				
4525	3	2	F	74W	0927	175321	65S	52S	40S	26S	13S	0N	12N	26N	39N	52N	65N	76N				
4526	4	2	F	103W	0927	194753	65S	53S	40S	27S	14S	0N	12N	25N	39N	52N	64N	75N				
4527	5	2	F	132W	0927	214220	65S	53S	40S	27S	14S	0N	12N	25N	39N	52N	64N	75N				
4528	6	2	F	160W	0927	233656	66S	53S	41S	28S	14S	1S	11N	25N	38N	51N	64N	75N				
4529	7	2	W	171E	0928	013136	66S	53S	41S	27S	14S	1S	11N	25N	38N	51N	64N	75N				
4530	8	2	W	142E	0928	032619	66S	53S	40S	27S	14S	1S	12N	25N	38N	52N	64N	75N				
4531	9	2	W	114E	0928	052105	65S	53S	40S	27S	14S	0N	12N	25N	39N	52N	65N	75N				
4532	10	2	W	85E	0928	071554	65S	52S	39S	26S	13S	0N	13N	26N	39N	52N	65N	76N				
4533	11	2	F	56E	0928	091046	64S	52S	39S	26S	12S	0N	13N	27N	40N	53N	66N	76N				
4534	12	2	F	28E	0928	110523	64S	52S	39S	26S	13S	0N	13N	26N	39N	53N	65N	76N				
4535	1	2	F	1W	0928	125944	65S	53S	40S	27S	14S	0N	12N	25N	39N	52N	64N	75N				
4536	2	2	F	30W	0928	145409	66S	53S	41S	28S	14S	1S	11N	25N	38N	51N	64N	75N				
4537	3	2	F	58W	0928	164837	66S	54S	41S	28S	15S	2S	11N	24N	37N	51N	63N	74N				
4538	4	2	F	87W	0928	184308	67S	54S	41S	28S	15S	2S	10N	24N	37N	50N	63N	74N				
4539	8	2	F	61E	2042	116401	54S	43S	30S	14S	3S	13N	24N	37N	50N	63N	74N					
4540	6	2	F	144W	0928	223219	67S	55S	42S	29S	16S	2S	10N	24N	37N	50N	63N	74N				
4541	7	2	W	173W	0929	002655	67S	55S	42S	29S	16S	2S	10N	23N	37N	50N	63N	74N				
4542	8	2	W	158E	0929	022137	67S	55S	42S	29S	15S	2S	10N	24N	37N	50N	63N	74N				
4543	9	2	W	130E	0929	041623	67S	54S	41S	28S	15S	2S	11N	24N	37N	51N	63N	75N				
4544	10	2	W	101E	0929	061112	66S	54S	41S	28S	15S	1S	11N	25N	38N	51N	64N	75N				
4545	11	2	W	72E	0929	080604	65S	53S	40S	27S	14S	0N	12N	25N	39N	52N	65N	75N				
4546	12	2	F	44E	0929	100059	65S	52S	39S	26S	13S	0N	13N	26N	39N	53N	65N	76N				
4547	13	2	F	15E	0929	115537	65S	52S	40S	27S	13S	0N	12N	26N	39N	52N	65N	75N				
4548	1	2	F	14W	0929	135000	65S	53S	40S	27S	14S	1S	12N	25N	38N	51N	64N	75N				
4549	2	2	F	42W	0929	154426	66S	54S	41S	28S	15S	1S	11N	24N	38N	51N	63N	75N				
4550	3	2	F	71W	0929	173855	67S	54S	41S	28S	15S	2S	10N	24N	37N	50N	63N	74N				
4551	4	2	F	100W	0929	193327	67S	55S	42S	29S	16S	2S	10N	23N	37N	50N	63N	74N				
4552	5	2	F	128W	0929	212803	67S	55S	42S	29S	16S	2S	10N	23N	37N	50N	63N	74N				
4553	6	2	F	157W	0929	232241	67S	55S	42S	29S	16S	2S	10N	23N	37N	50N	63N	74N				
4554	7	2	W	174E	0930	011716	67S	55S	42S	29S	16S	3S	10N	23N	37N	50N	63N	74N				
4555	8	2	W	146E	0930	031200	67S	55S	42S	29S	16S	2S	10N	24N	37N	50N	63N	74N				
4556	9	2	W	117E	0930	050647	67S	54S	41S	28S	15S	2S	11N	24N	37N	51N	63N	75N				
4557	10	2	W	88E	0930	070138	66S	54S	41S	28S	14S	1S	11N	25N	38N	51N	64N	75N				
4558	11	2	F	61E	0930	085631	67S	54S	42S	28S	15	2S	12N	26N	39N	53N	65N	76N				
4559	12	2	F	31E	0930	105128	65S	52S	39S	26S	13S	0N	13N	26N	40N	53N	66N	76N				
4560	13	2	F	2E	0930	124607	65S	52S	39S	26S	13S	0N	13N	26N	39N	52N	65N	76N				
4561	1	2	F	26W	0930	144030	65S	53S	40S	27S	14S	1S	12N	25N	38N	52N	64N	75N				
4562	2	2	F	55W	0930	163456	66S	54S	41S	28S	14S	1S	11N	25N	38N	51N	64N	75N				
4563	3	2	F	84W	0930	182925	66S	54S	41S	28S	15S	2S	11N	24N	37N	51N	63N	74N				
4564	4	2	F	112W	0930	202357	67S	54S	42S	29S	15S	2S	10N	24N	37N	50N	63N	74N				
4565	5	2	F	141W	0930	221833	67S	55S	42S	29S	15S	2S	10N	24N	37N	50N	63N	74N				

TABLE 1

TRACK TABLE FOR ESSA 3

Range of Ascending Nodes	Track No.
0 - 28.7W	1
28.7W - 57.4W	2
57.4W - 86.1W	3
86.1W - 114.8W	4
114.8W - 143.5W	5
143.5W - 172.2W	6
172.2W - 159.1E	7
159.1E - 130.4E	8
130.4E - 101.7E	9
101.7E - 73.0E	10
73.0E - 44.3E	11
44.3E - 15.6E	12
15.6E - 0	13

Difference between Tracks - 28.7°

TABLE 2

TRACK TABLE FOR ESSA 5

Range of Ascending Nodes	Track No.
0 - 28.4W	1
28.4W - 56.8W	2
56.8W - 85.2W	3
85.2W - 113.6W	4
113.6W - 142.0W	5
142.0W - 170.4W	6
170.4W - 161.2E	7
161.2E - 132.8E	8
132.8E - 104.4E	9
104.4E - 76.0E	10
76.0E - 47.6E	11
47.6E - 19.2E	12
19.2E - 0	13

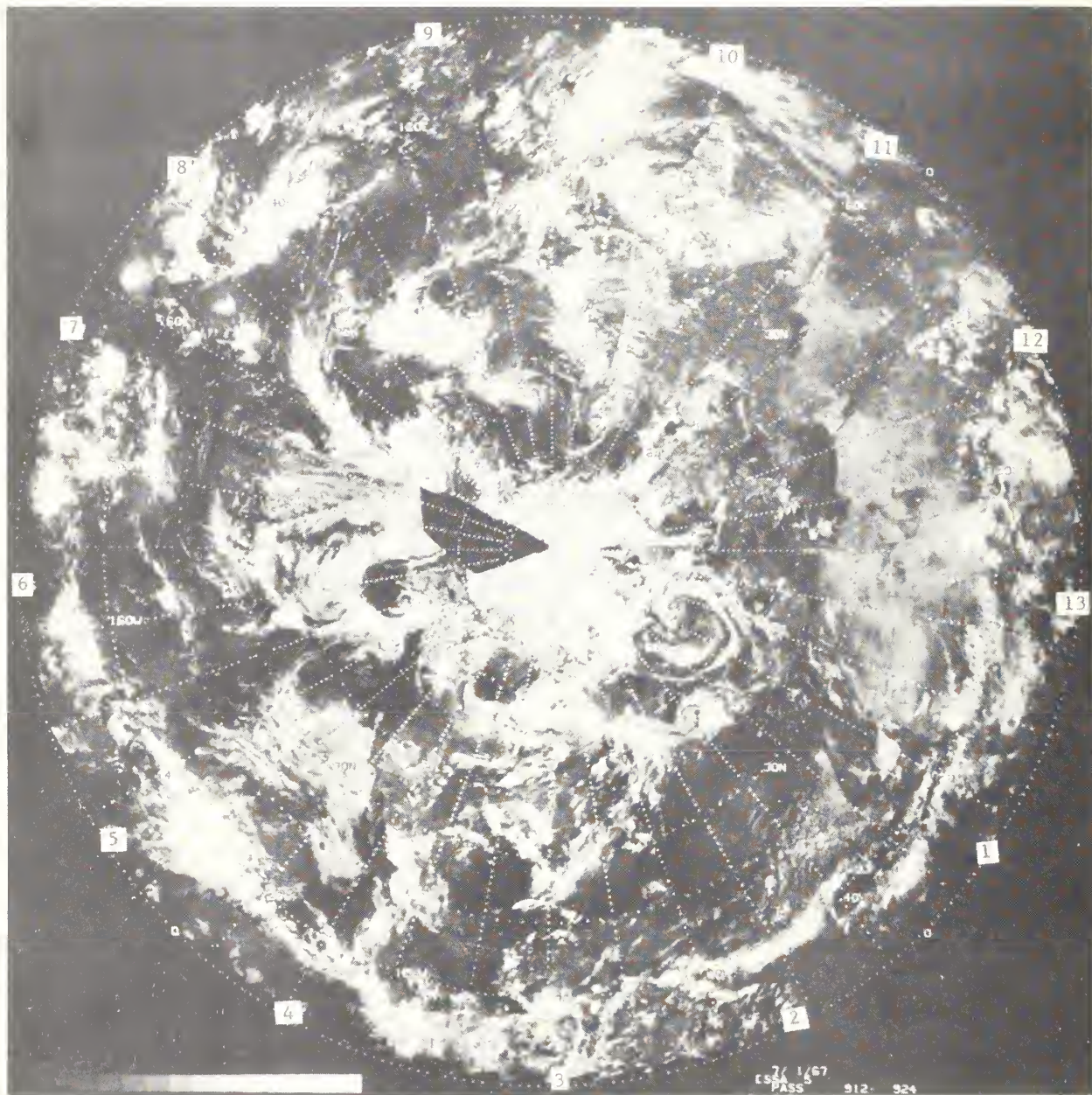
Difference between Tracks - 28.4°

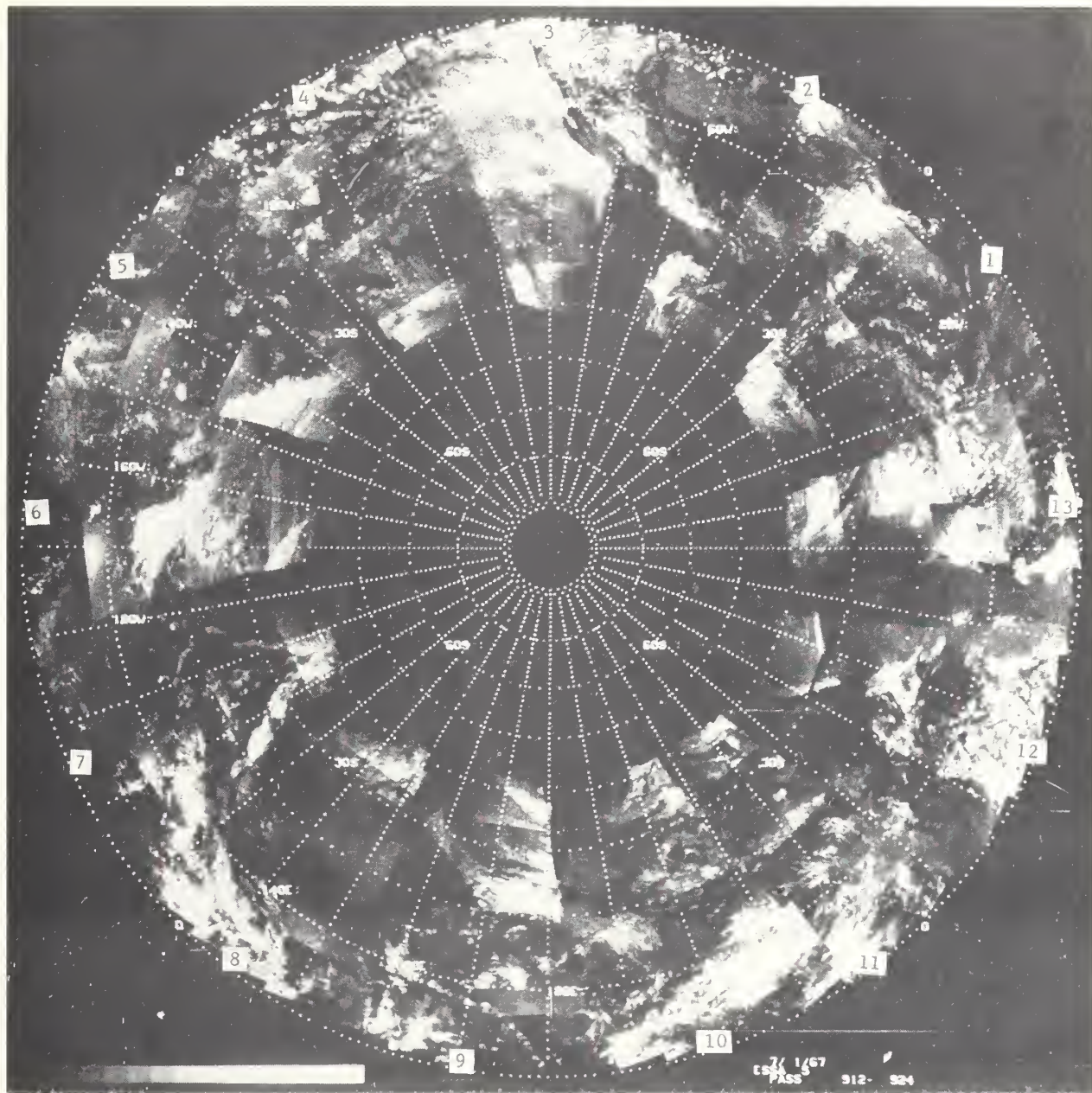
Day to day variations and irregularities which result in improper locating or display of the data are apparent in this catalog. At present, inadequate computer facilities prevent any effort to reformat the mosaic image on an after-the-fact basis. Those days with obvious problems are listed below in chronological order:

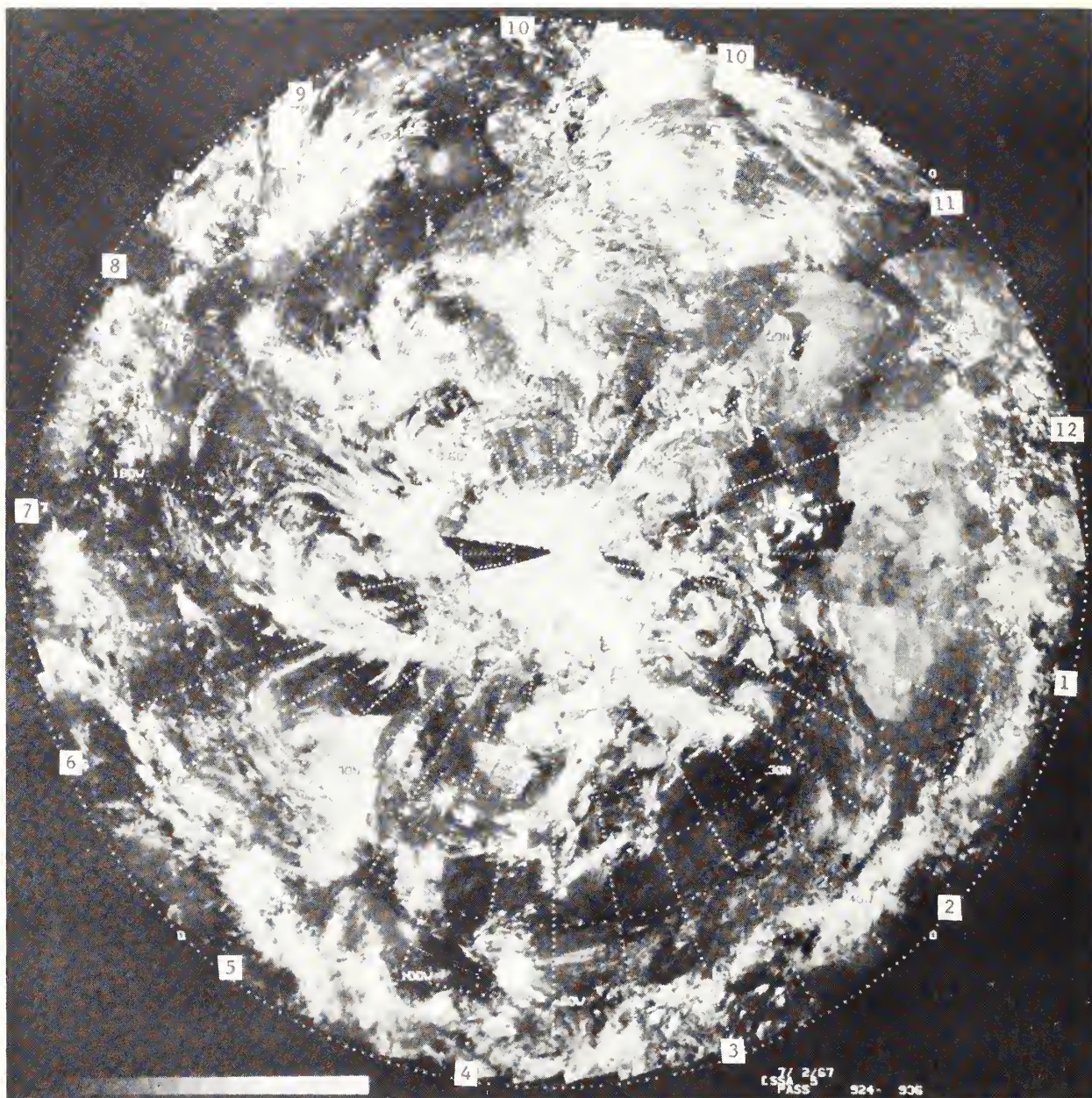
DATEREASON

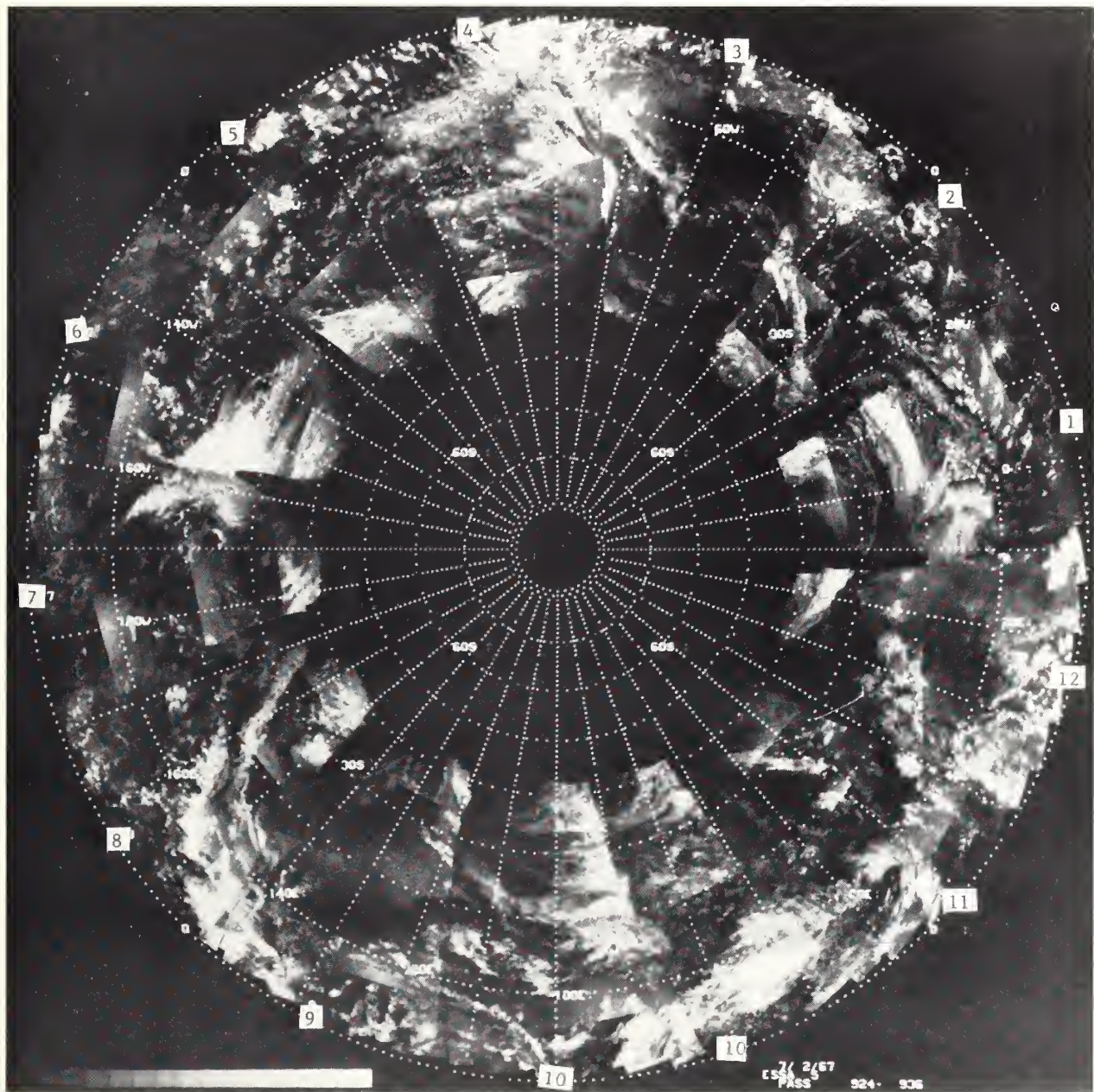
7/ 4/67	Half day missing due to computer outage.
7/13/67	Pass at 165E displaced by 1 frame.
7/14/67	Pass 100E missing.
7/15/67	2 passes at 120-100E missing, pass at 145E off by 1 frame.
7/16/67	Grey scale wedge inserted for bad frame.
7/17/67	5 passes missing due to computer outage.
7/29/67	4 passes missing due to computer outage.
7/30/67	Vertical lines due to Link problem.
8/ 5/67	3 passes missing due to computer outage.
8/ 9/67	1 frame missing.
8/15/67	2 wedges inserted for noisy frames.
8/16/67	2 missing frames.
8/17/67	3 missing frames.
8/18/67	2 missing frames.
8/19/67	4 missing frames.
8/20/67	4 missing frames.
8/21/67	2 missing frames.
8/22/67	3 missing frames.
8/23/67	2 missing frames.
8/24/67	1 missing frame.
8/26/67	2 missing frames.
8/29/67	3 wedges inserted for noisy data.
8/30/67	3 missing frames.
9/ 5/67	Started purge ahead (see 80E for 24 hour break).
9/ 7/67	1 noisy frame.
9/ 8/67	Started coastline and grid meld.
9/11/67	1 pass not mapped - scheduling error.
9/15/67	16 frames not mapped due to program error - started using E-3.
9/21/67	False 24 hour break at 100W.
9/26/67	9 frames missing from Southern Hemisphere.
9/29/67	Some frames at 60E noisy.

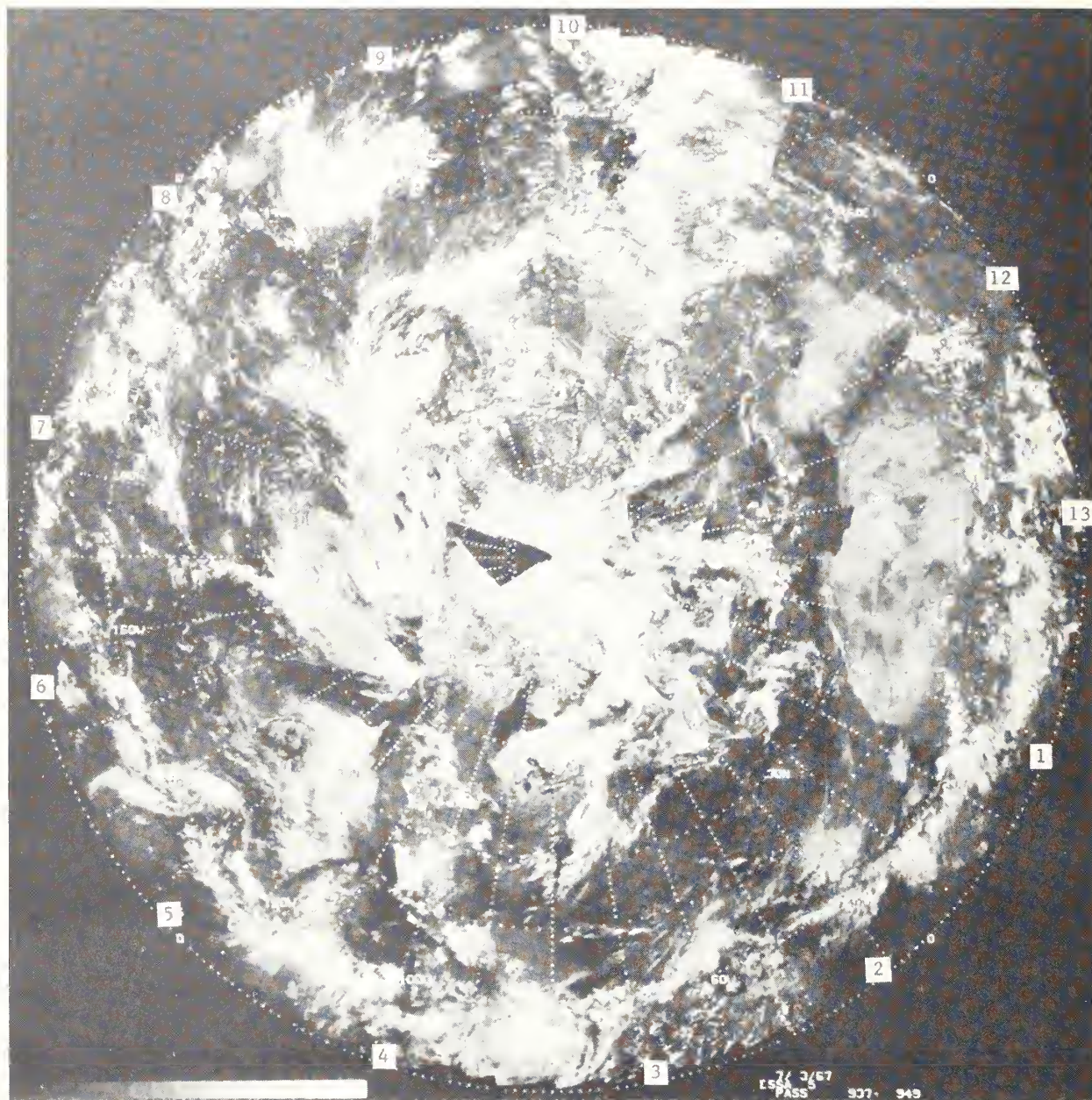
Some other inconsistencies are related to photographic and printing problems. Original film negatives may not exhibit these problems.

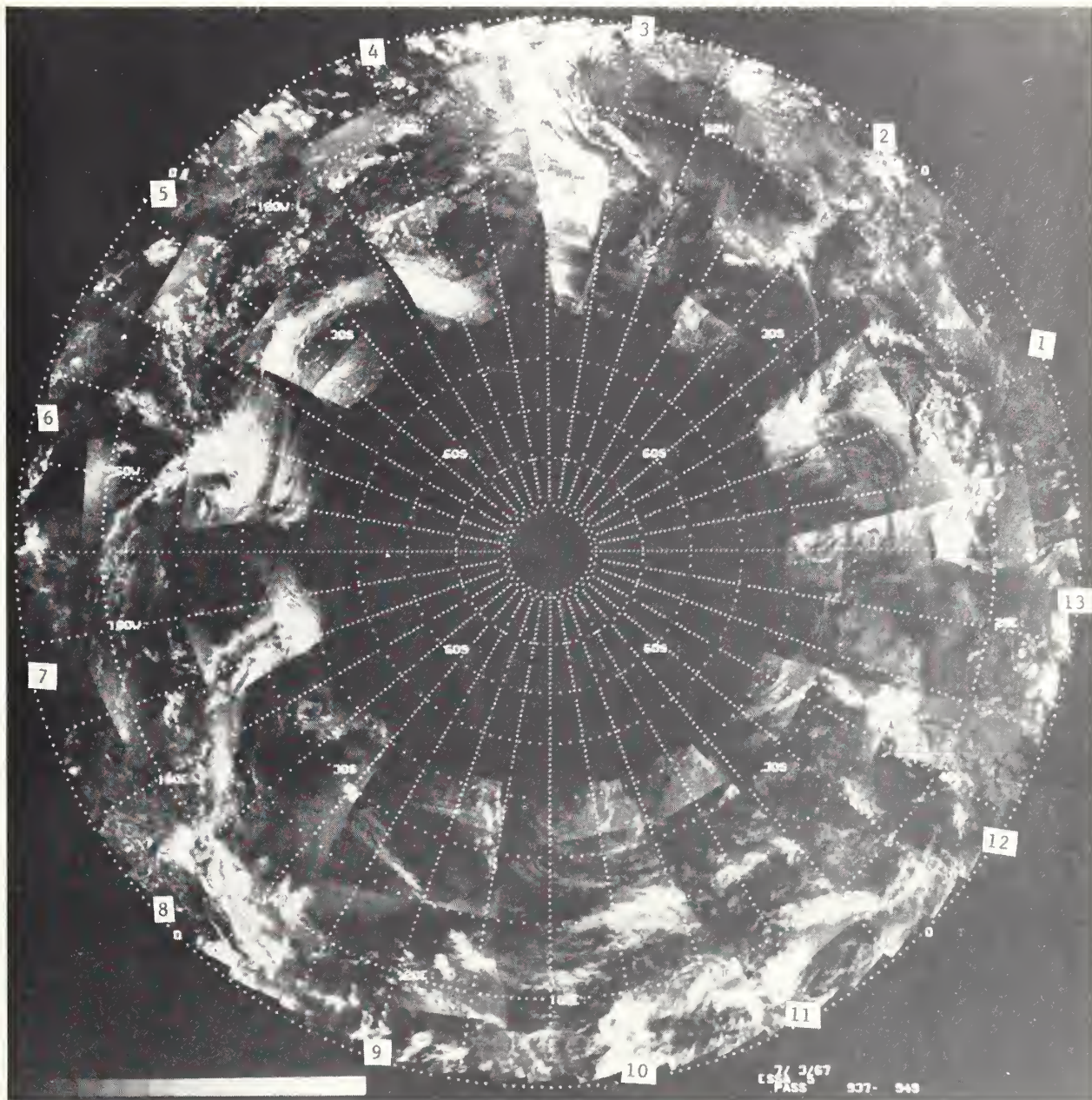


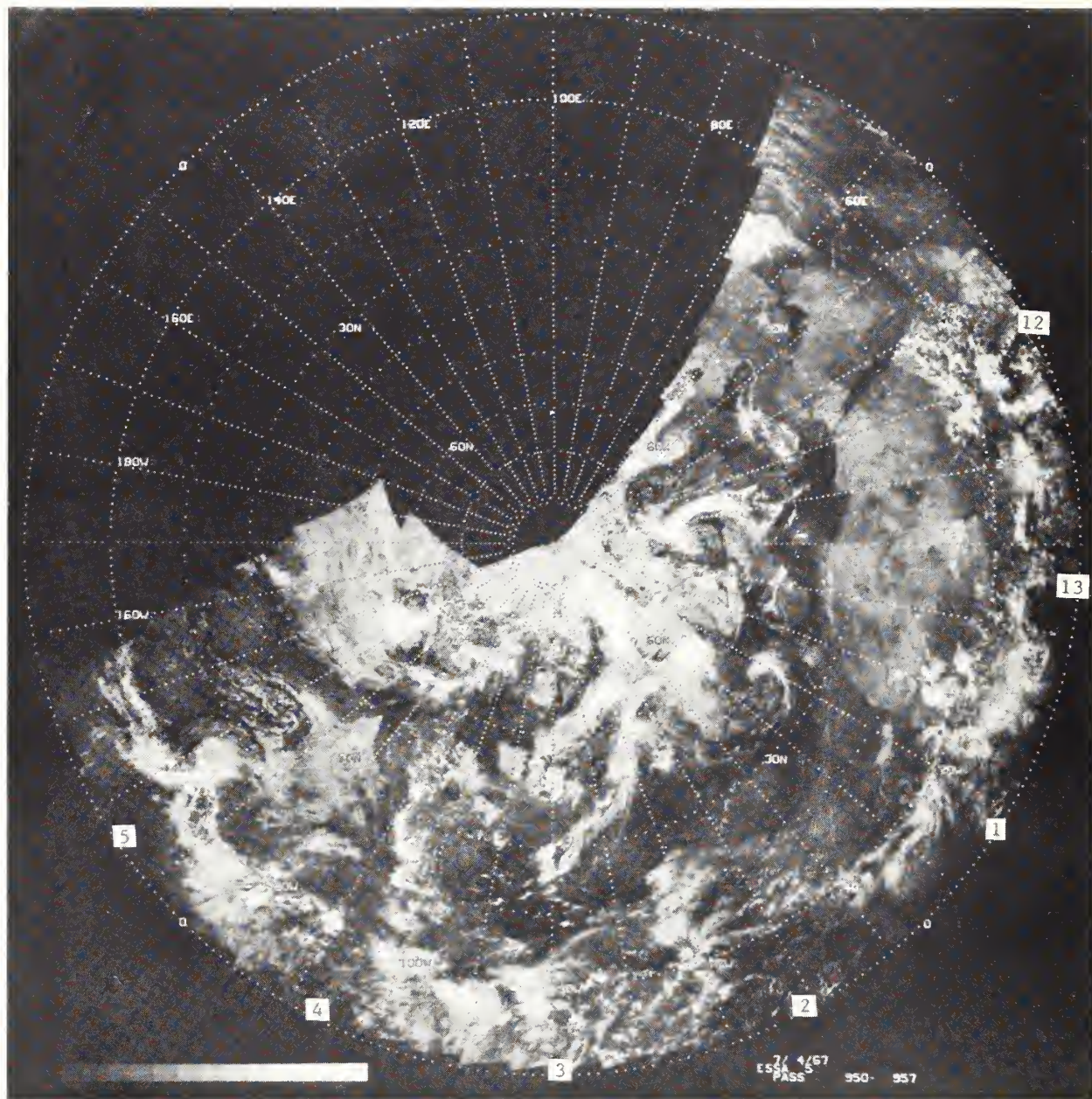


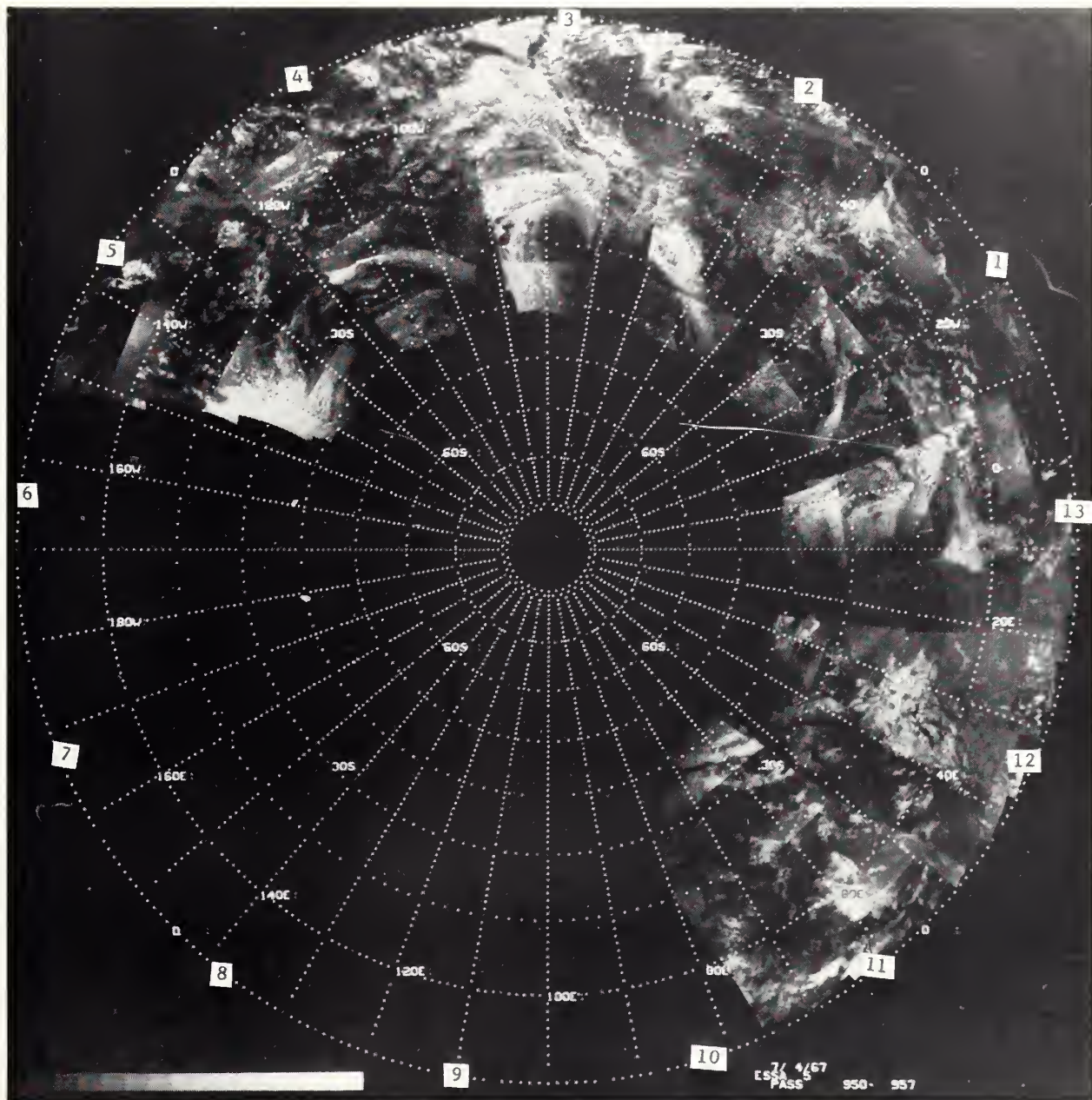


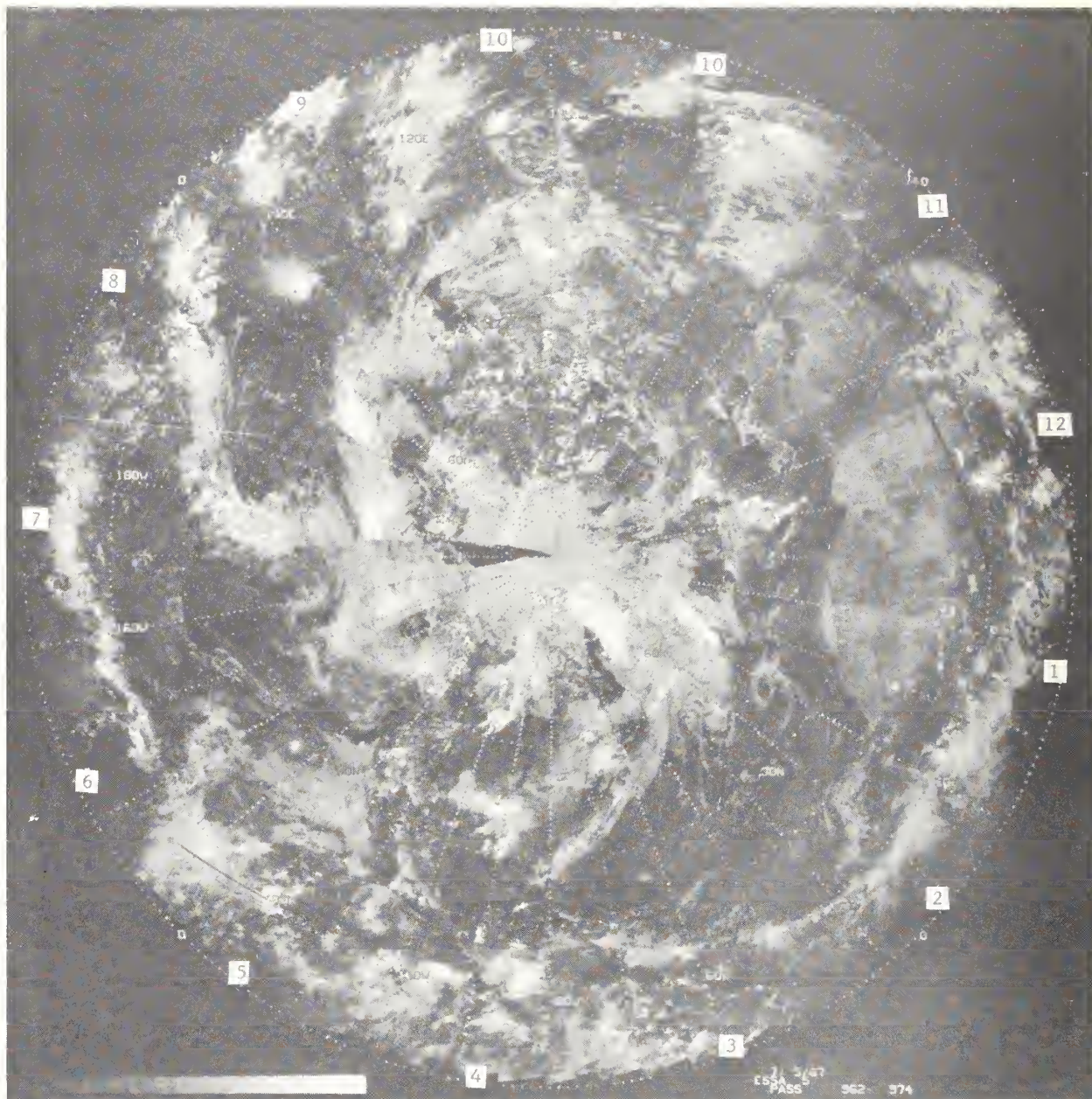


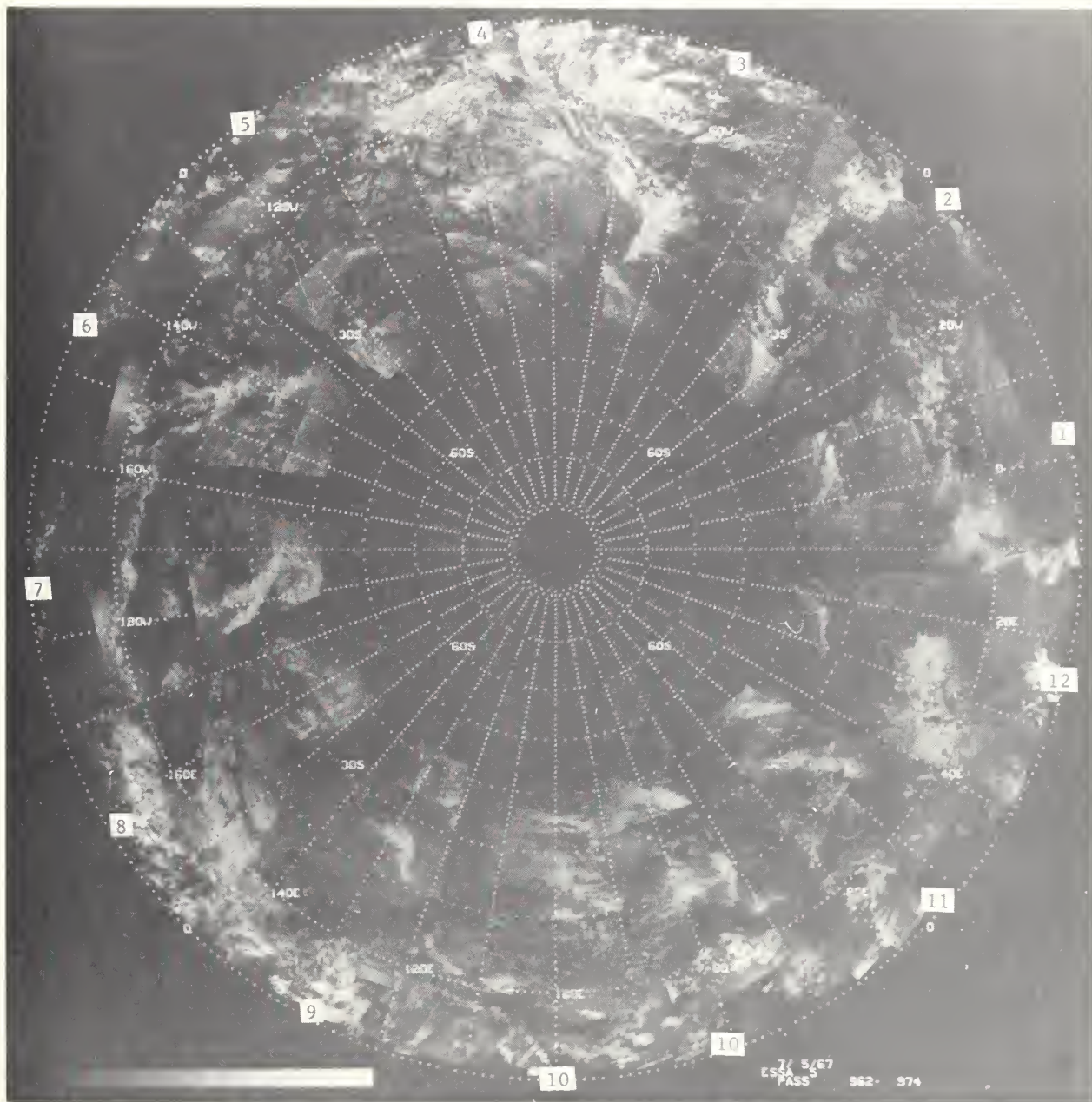


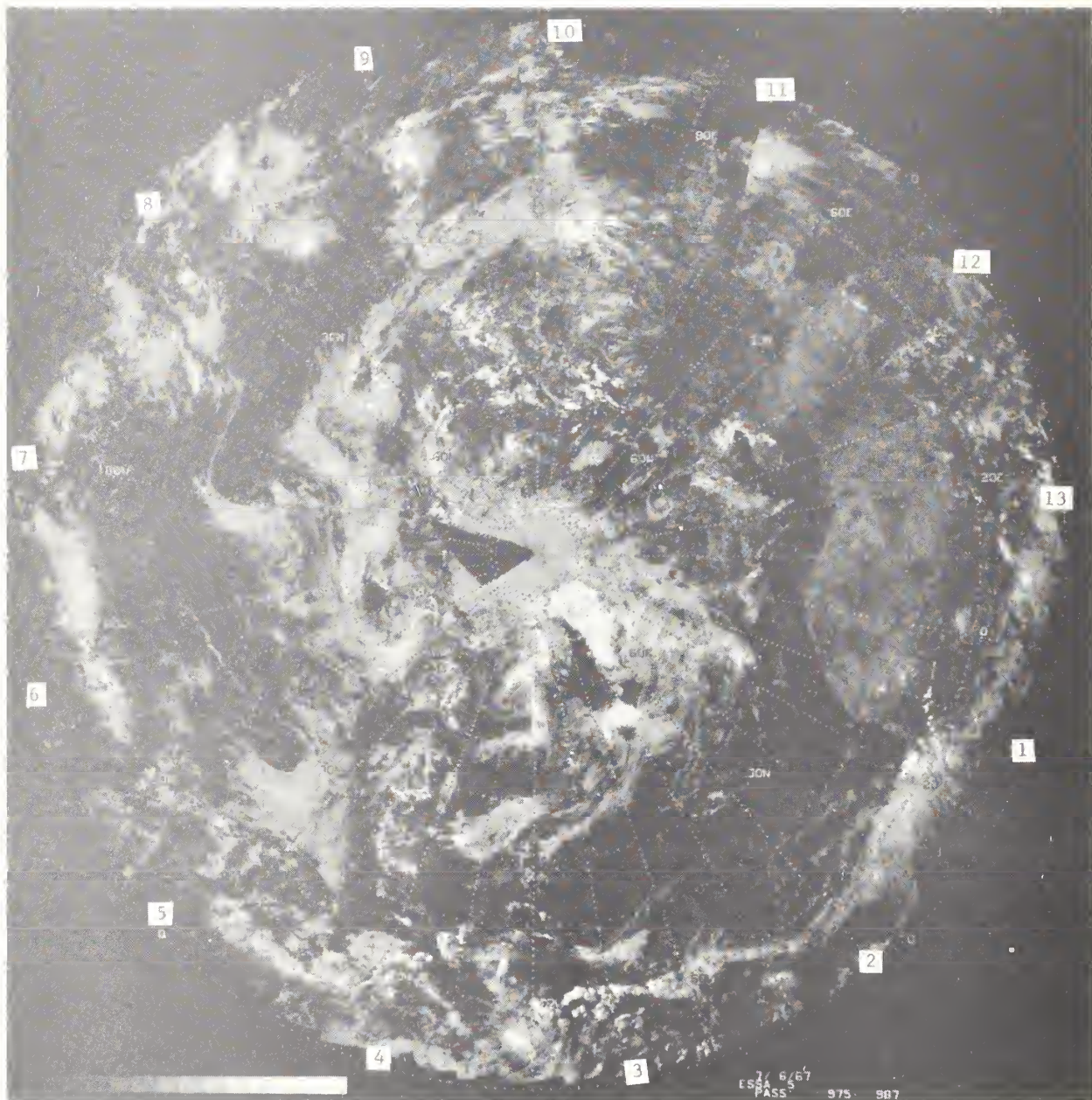




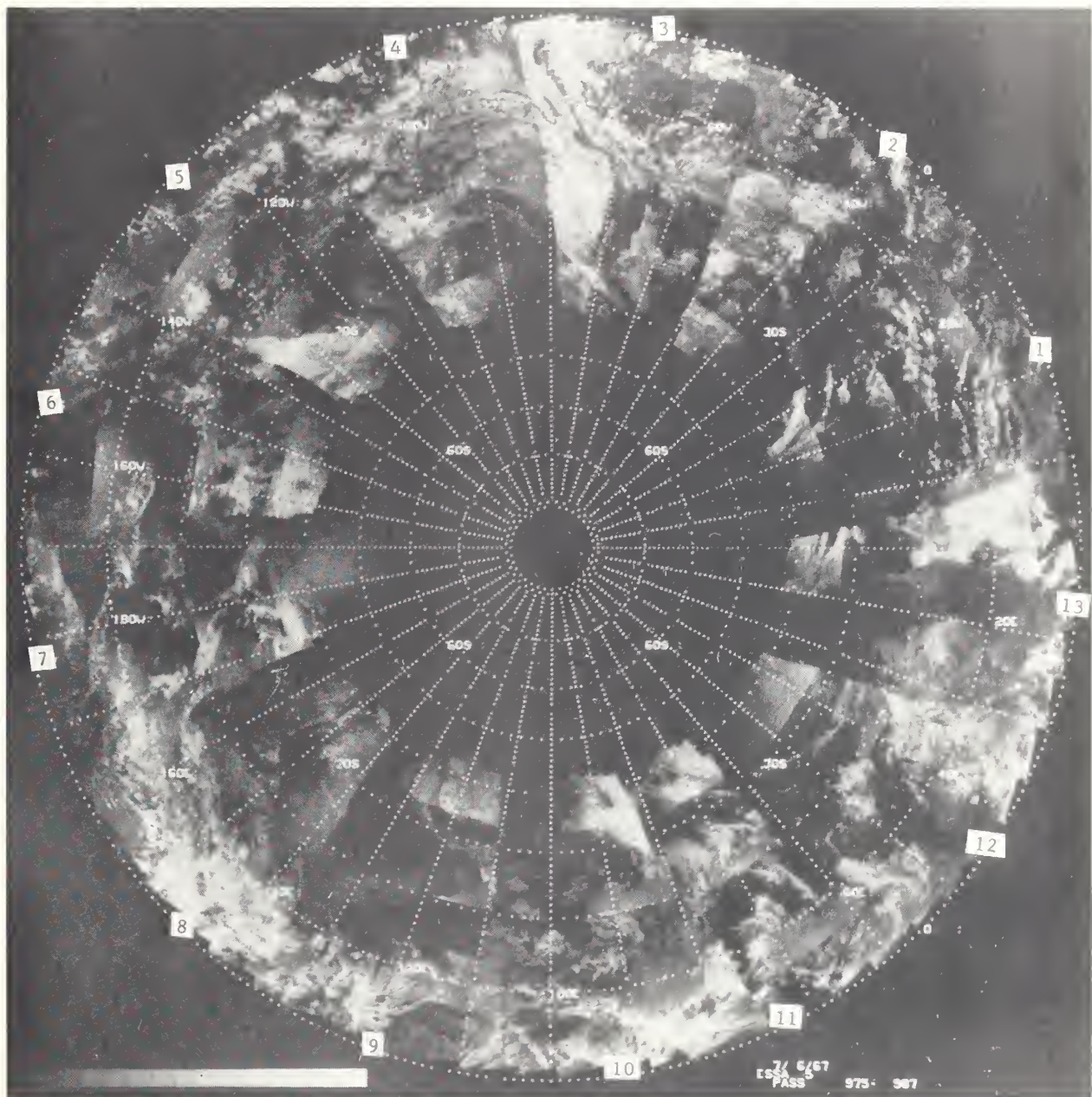


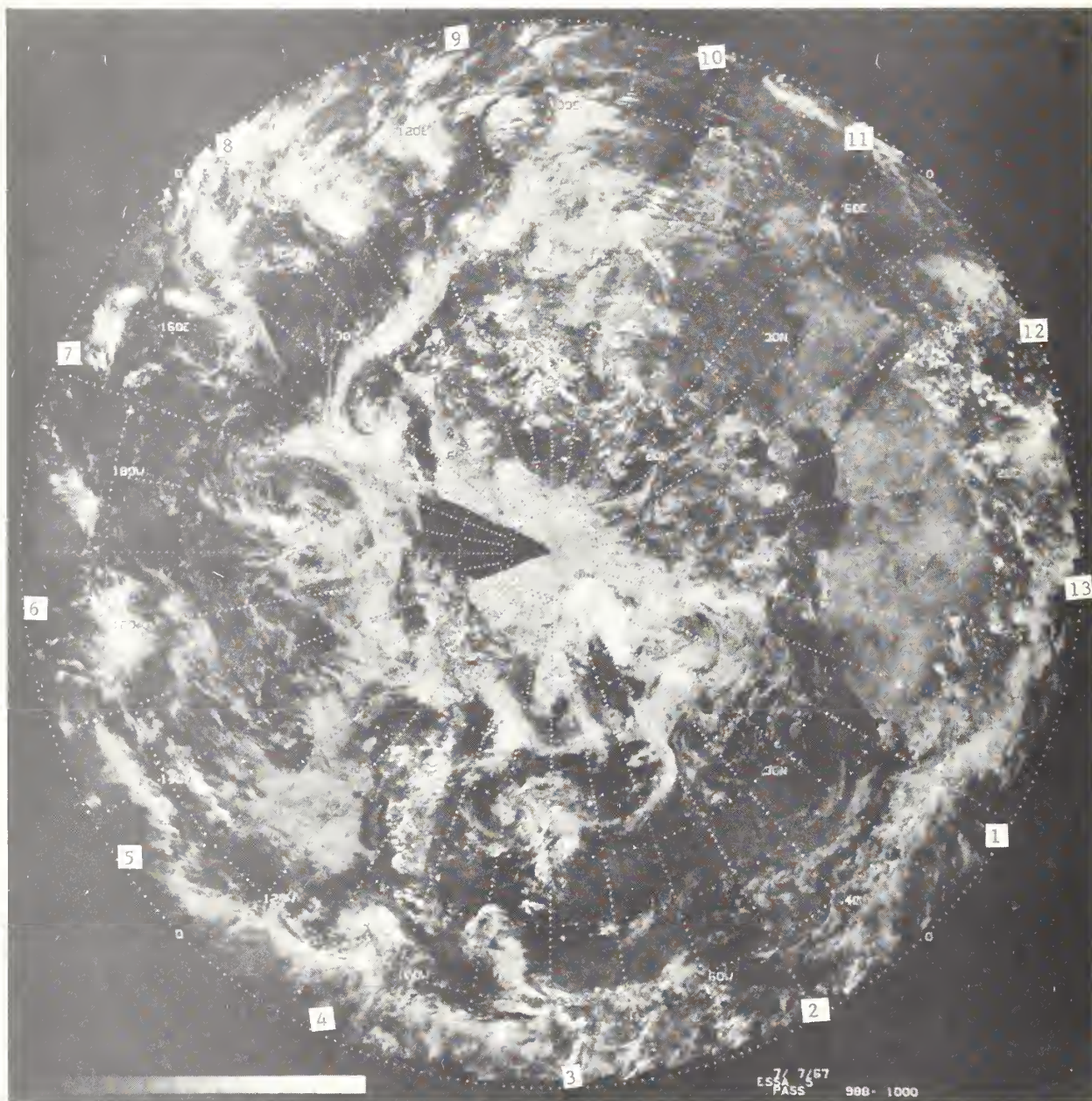


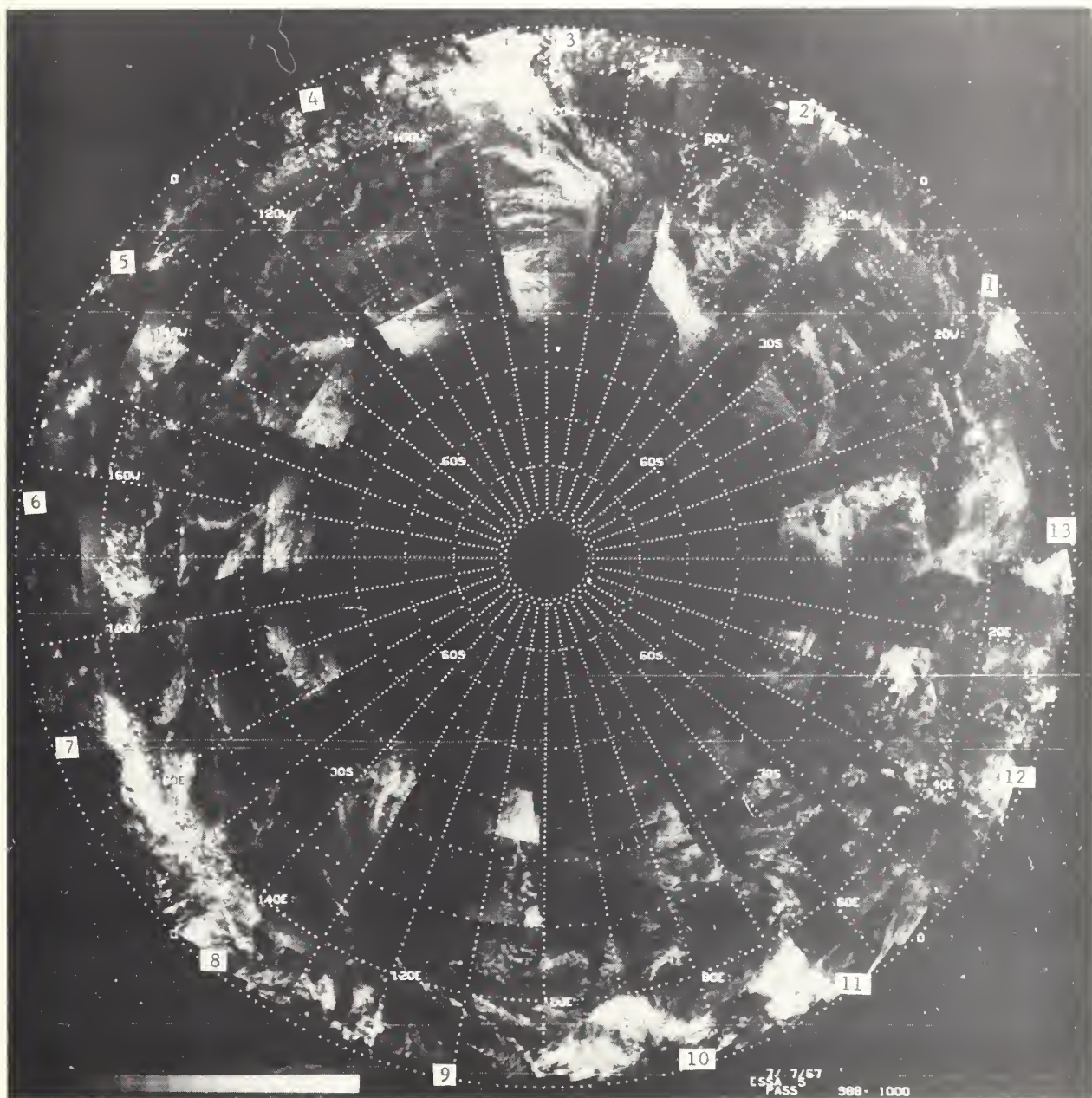


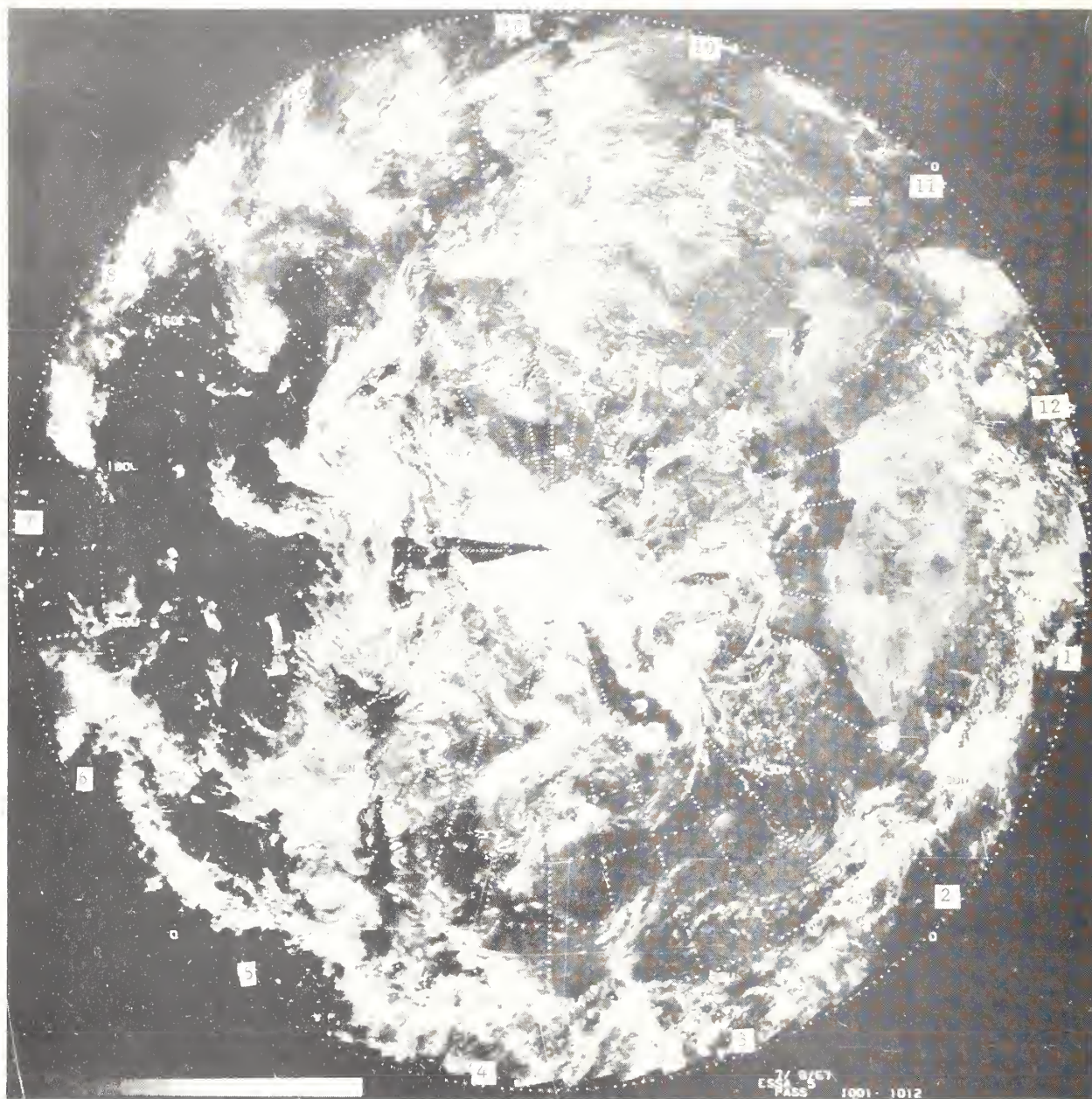


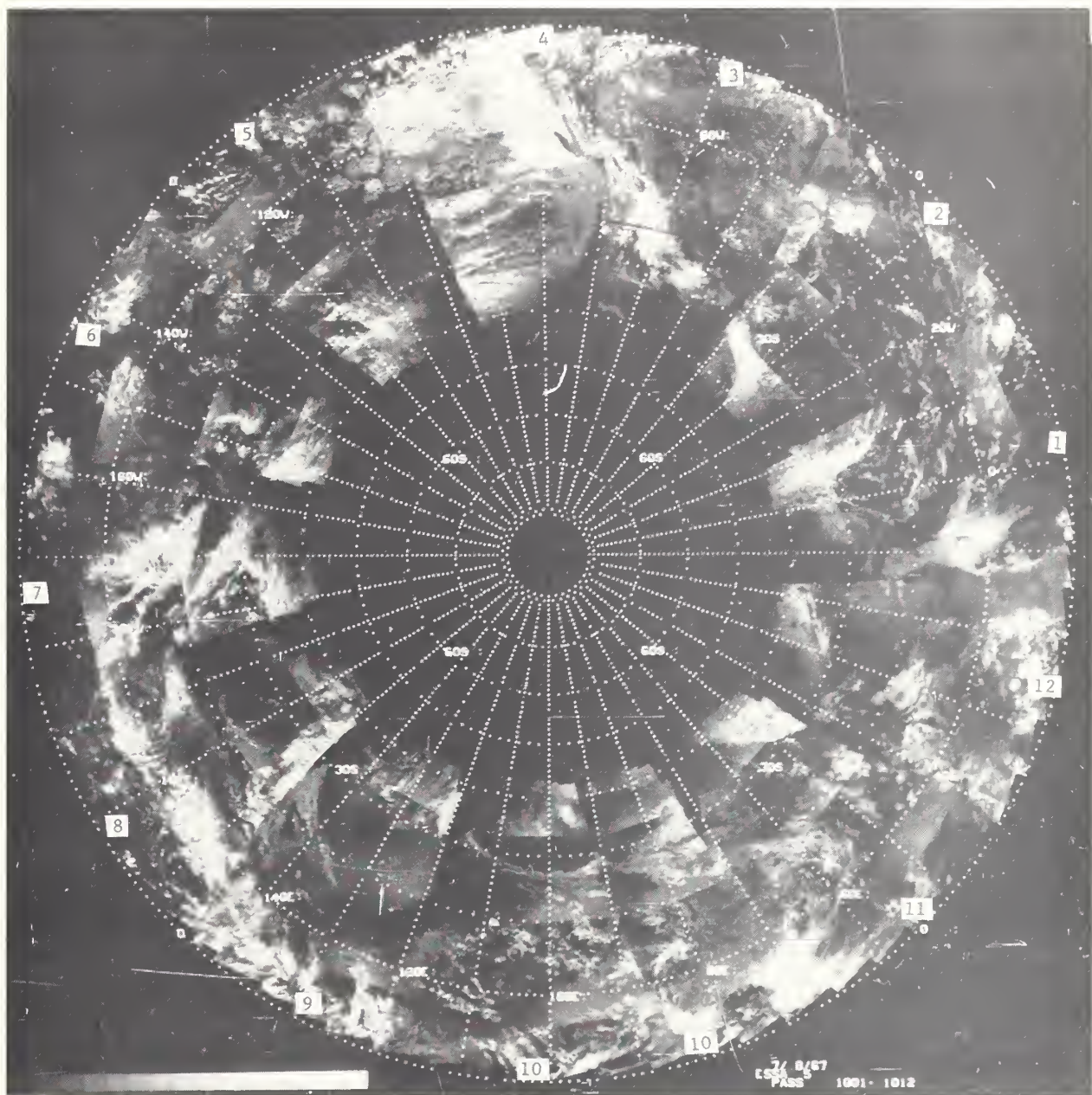
ES 2/ 6/67
PASS 975 987

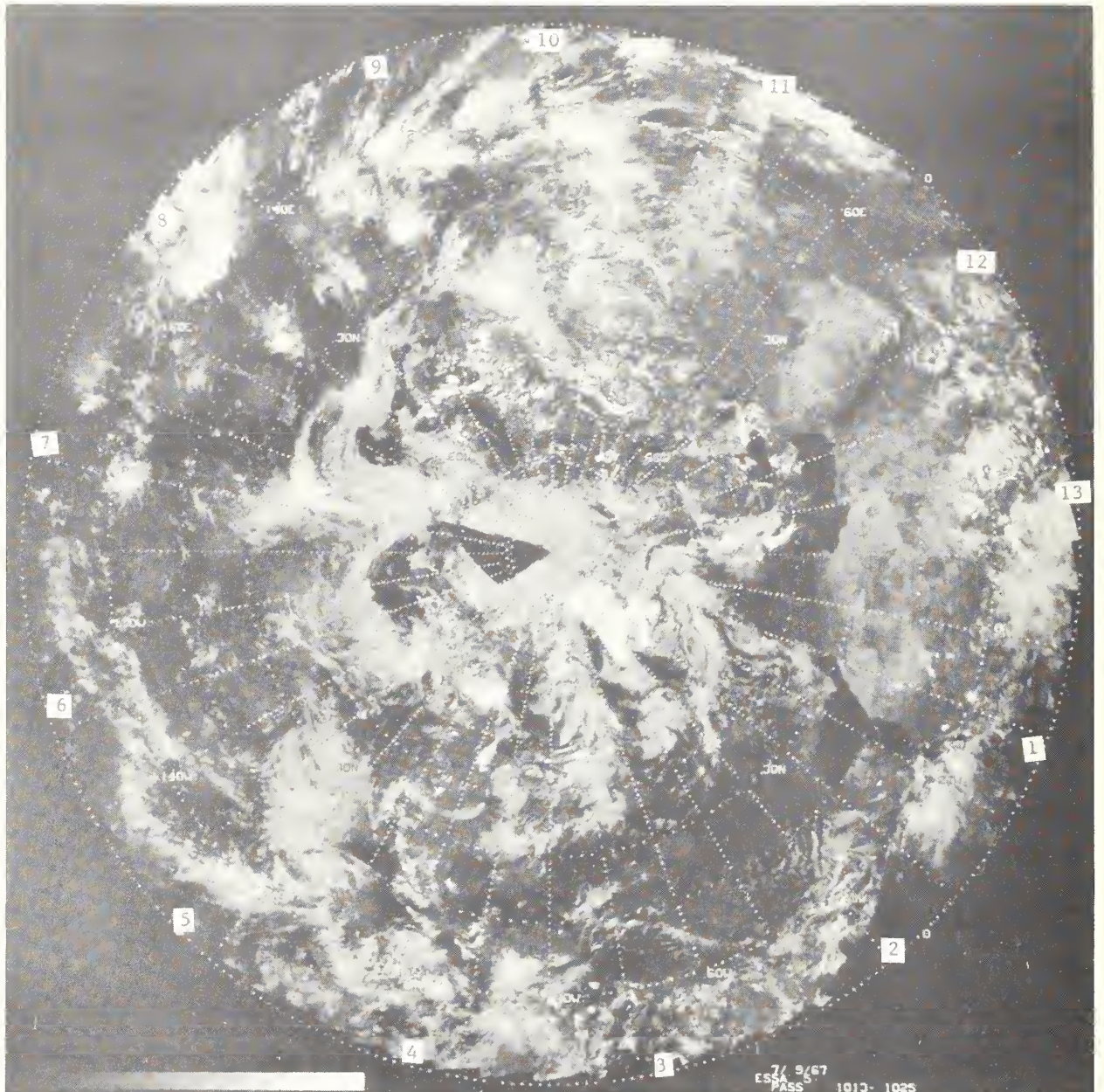


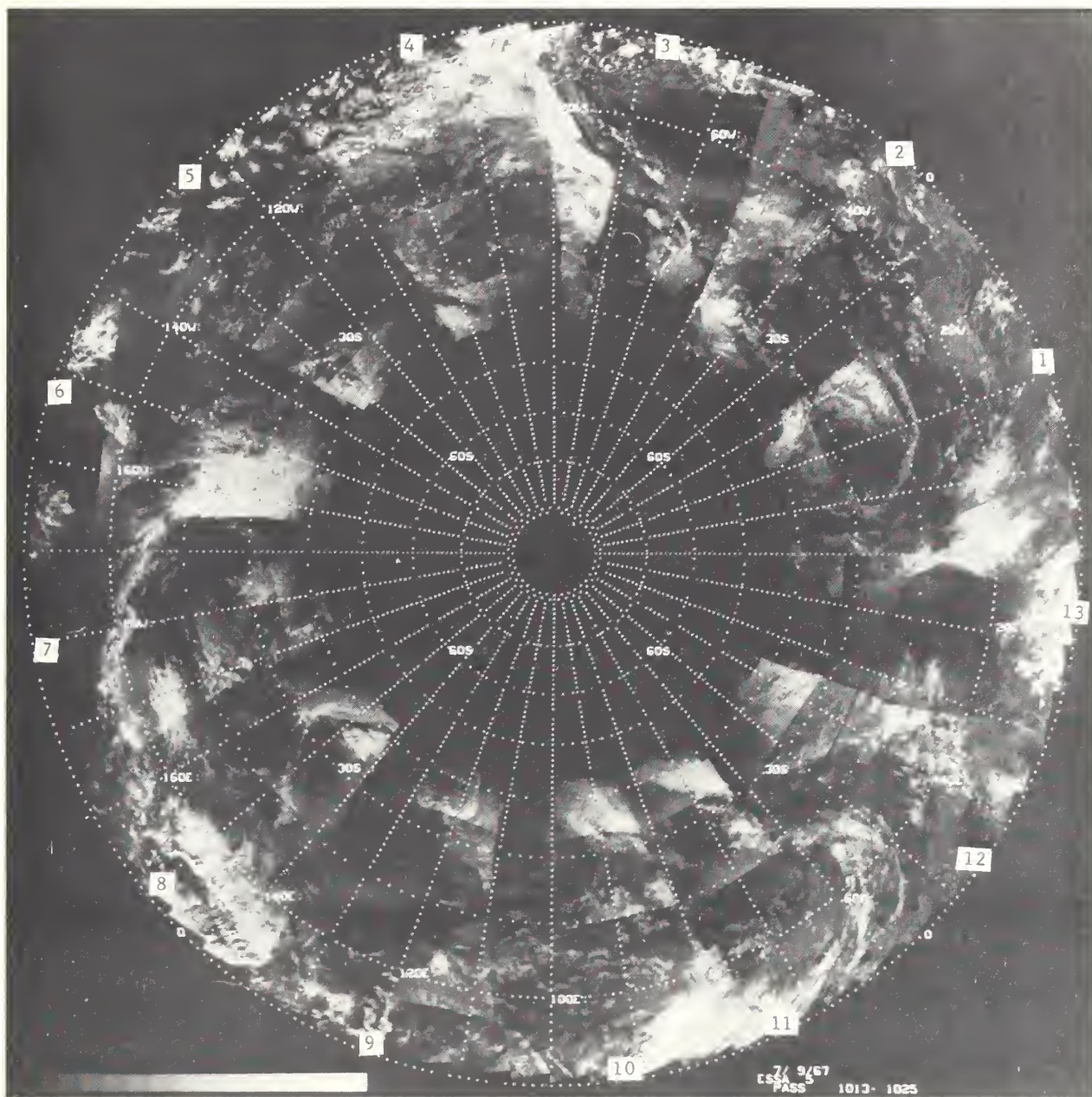


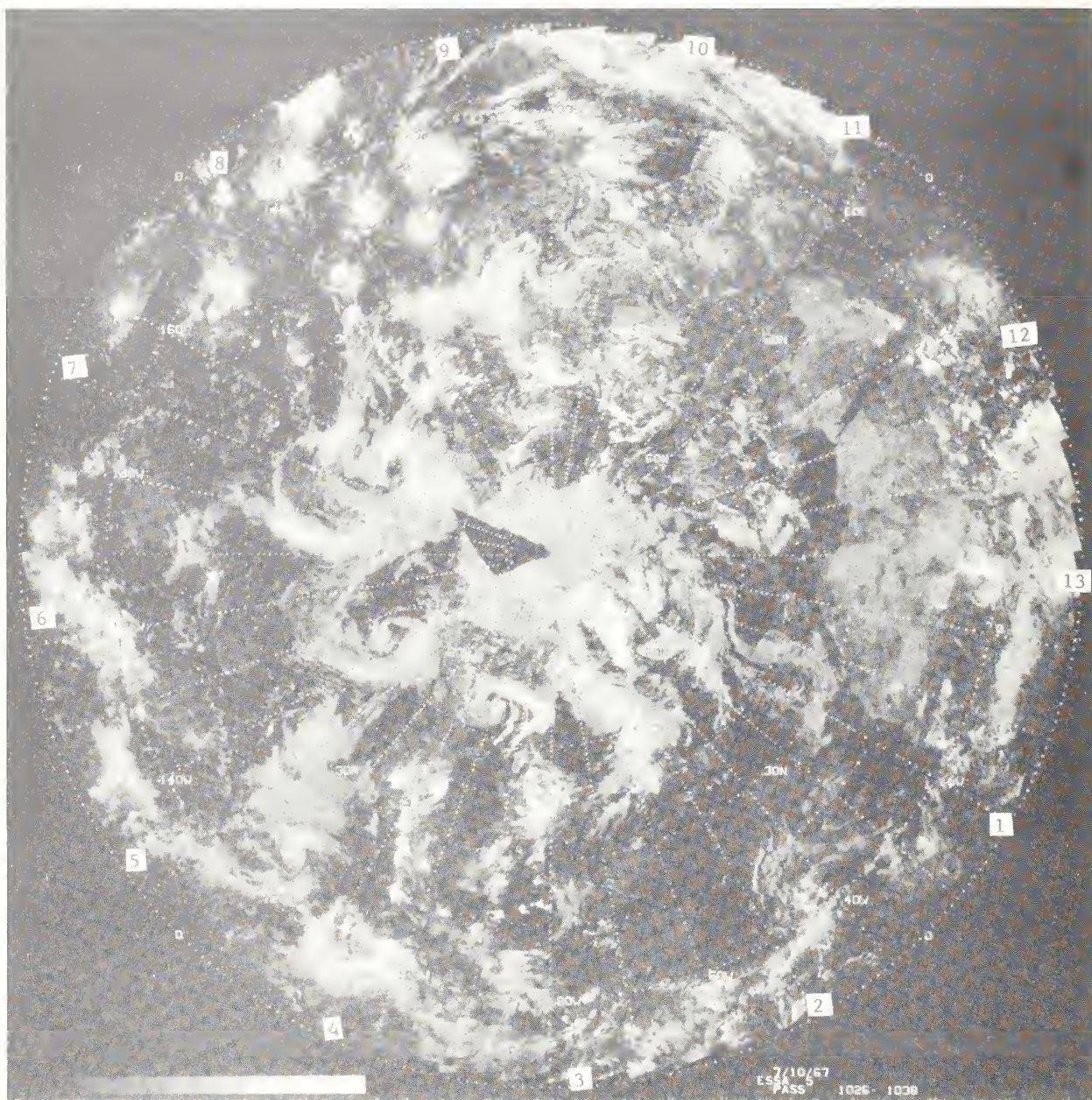


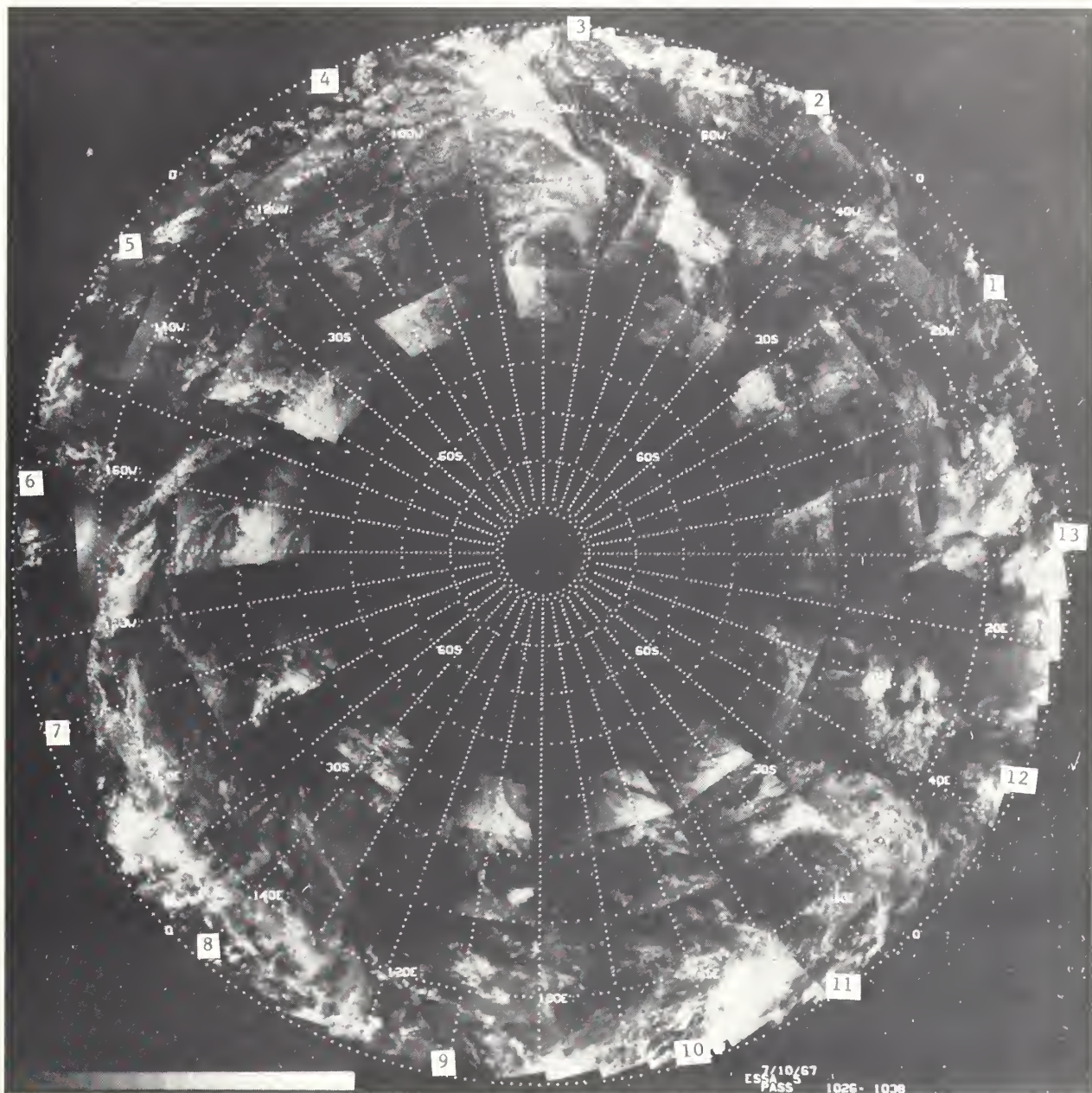


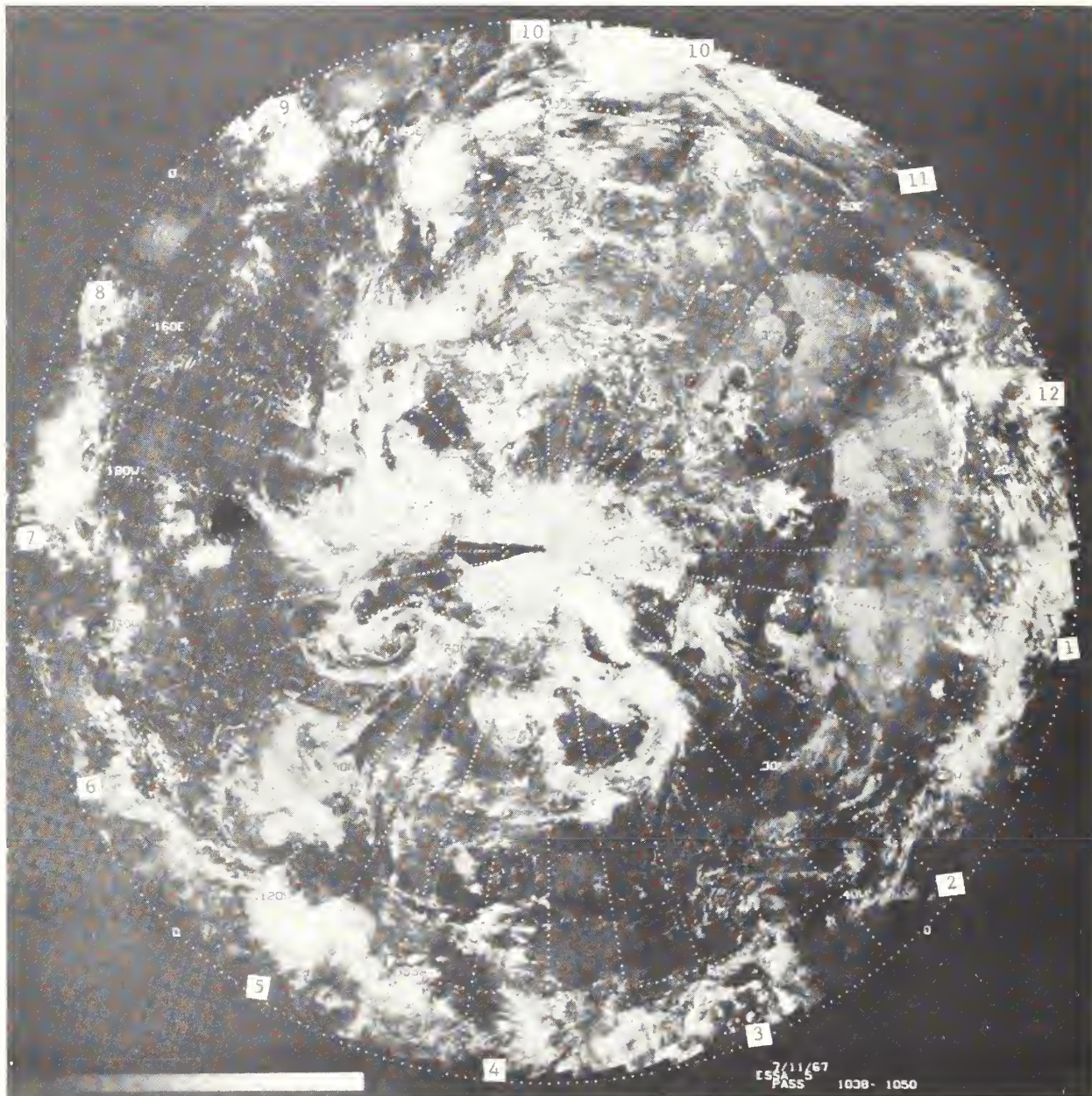


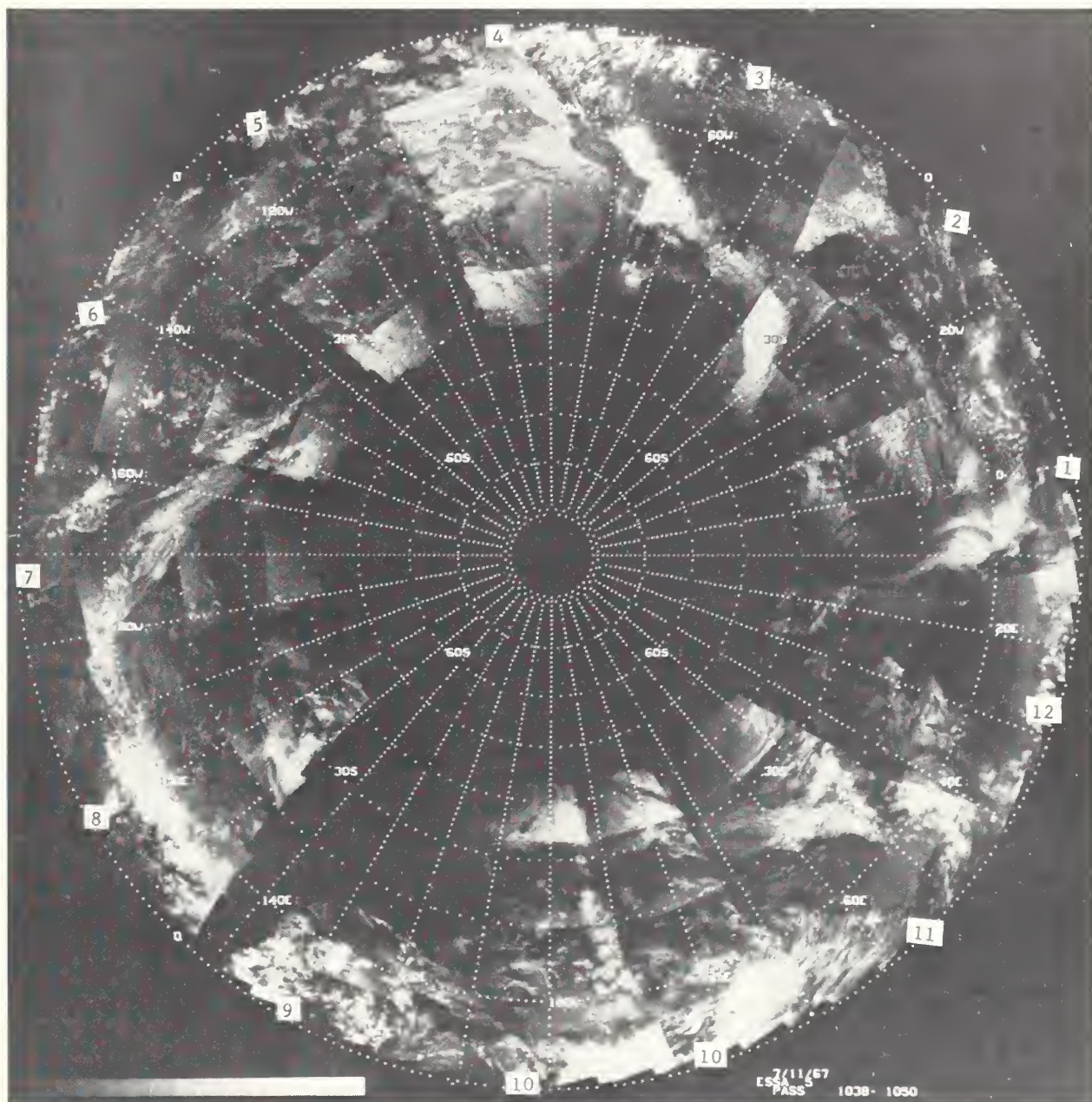


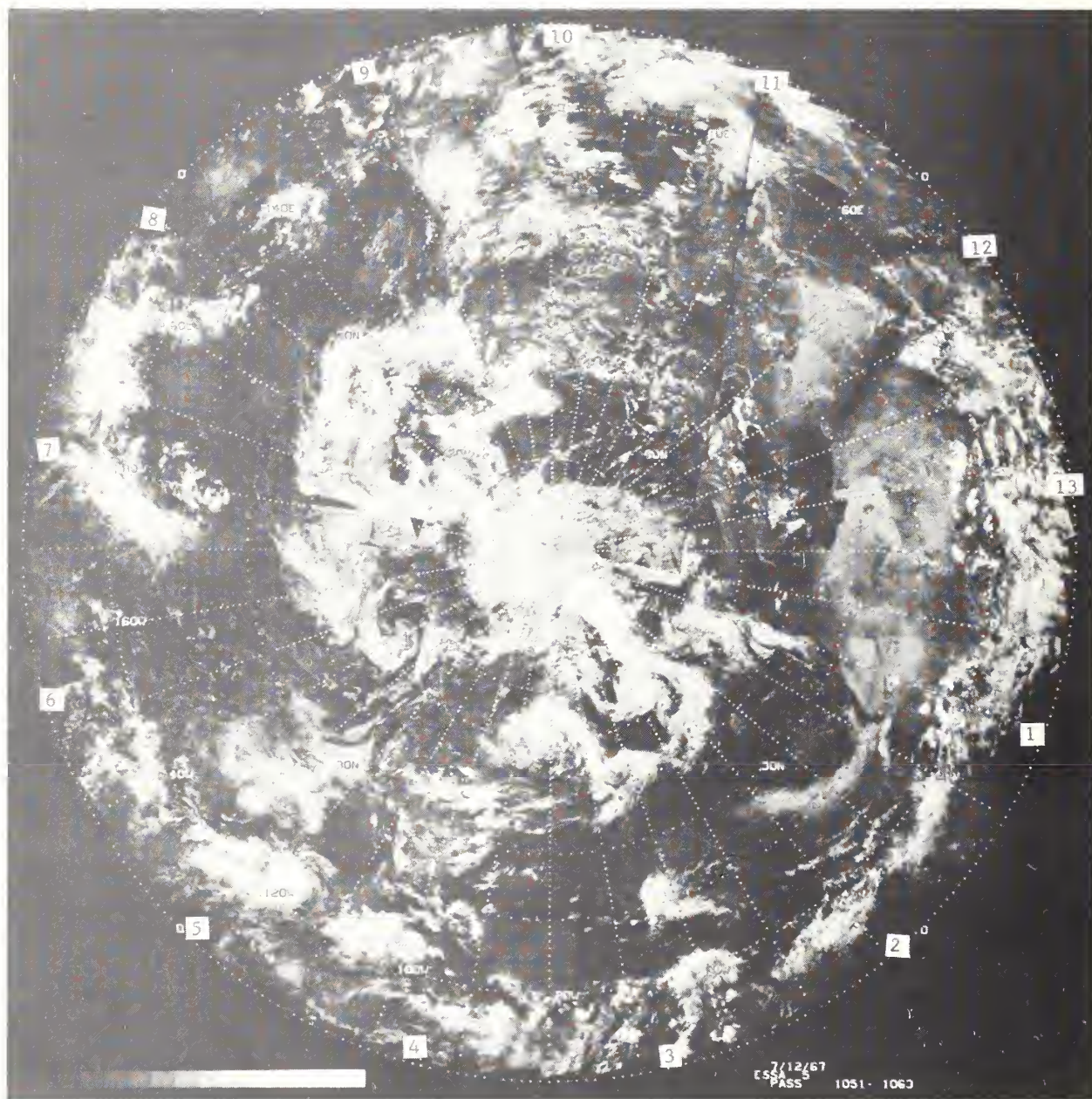


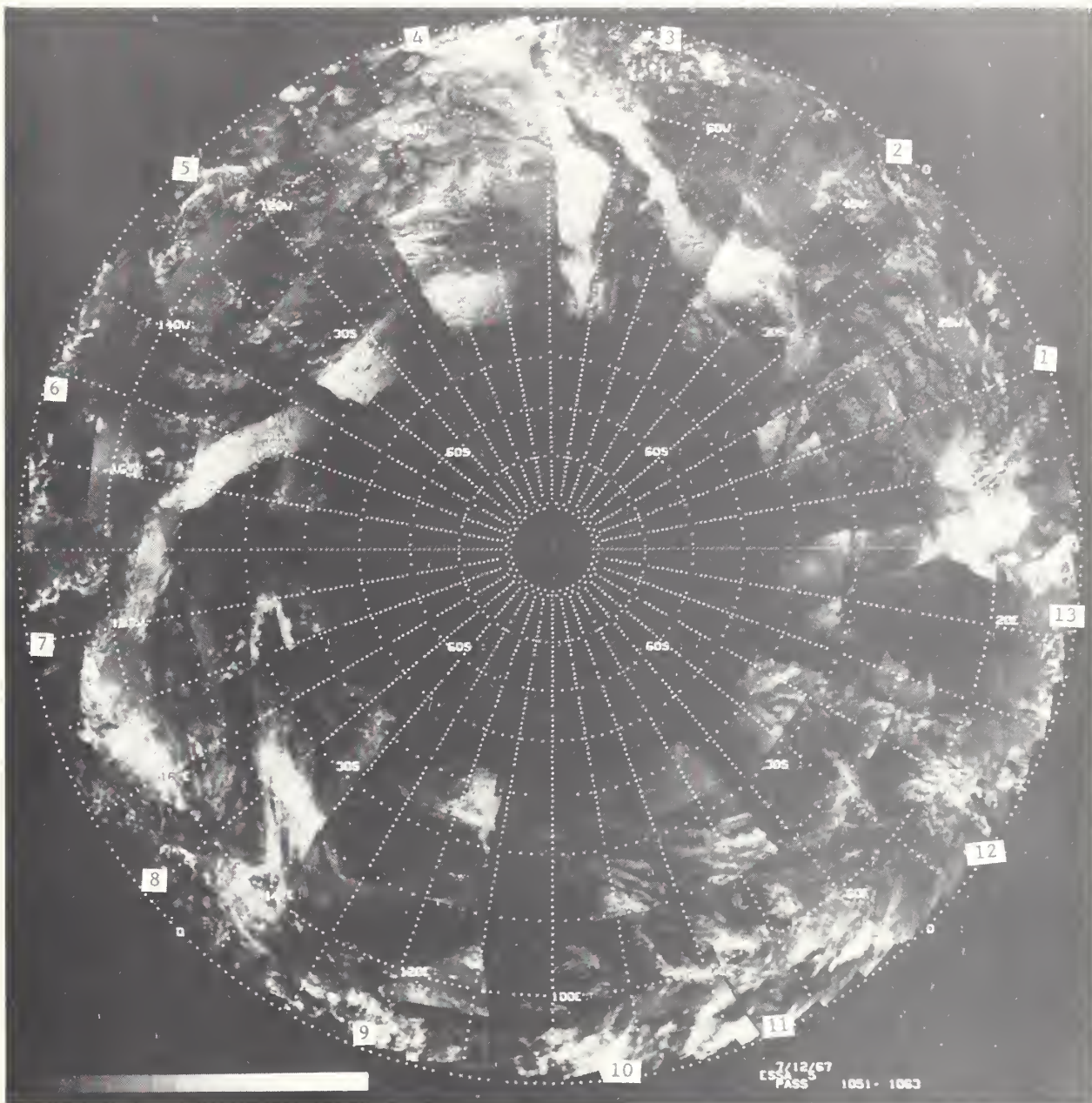


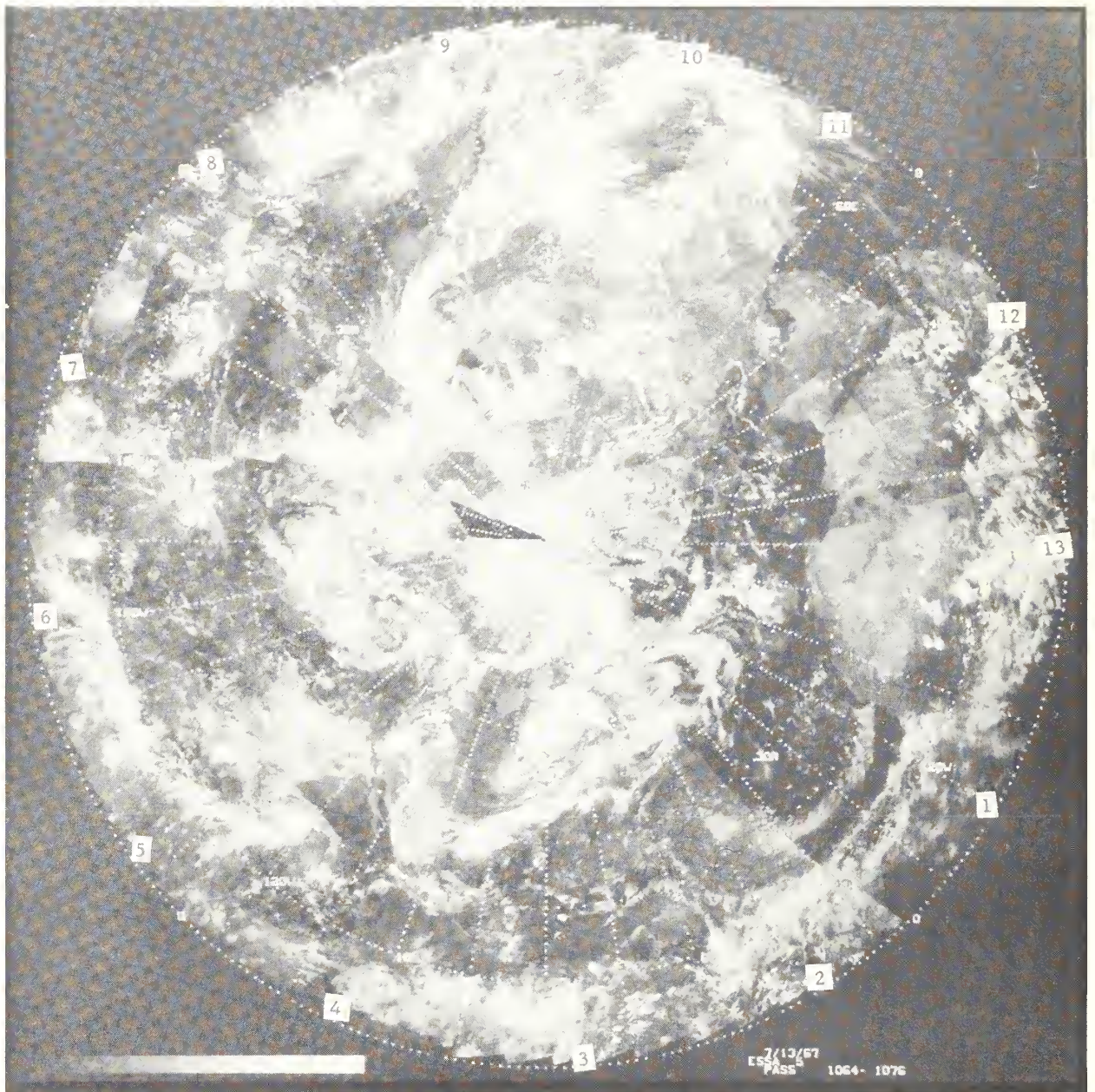


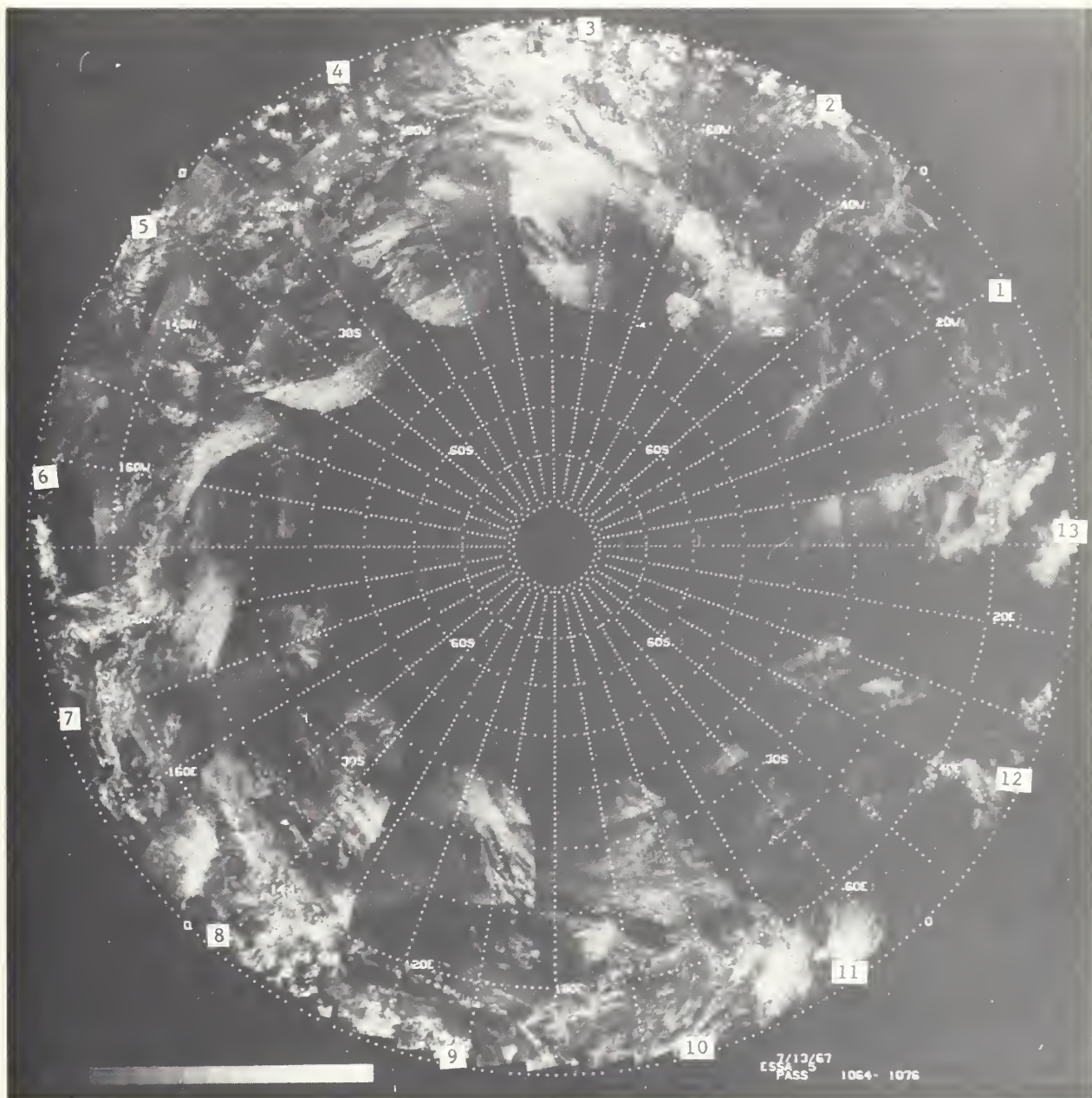


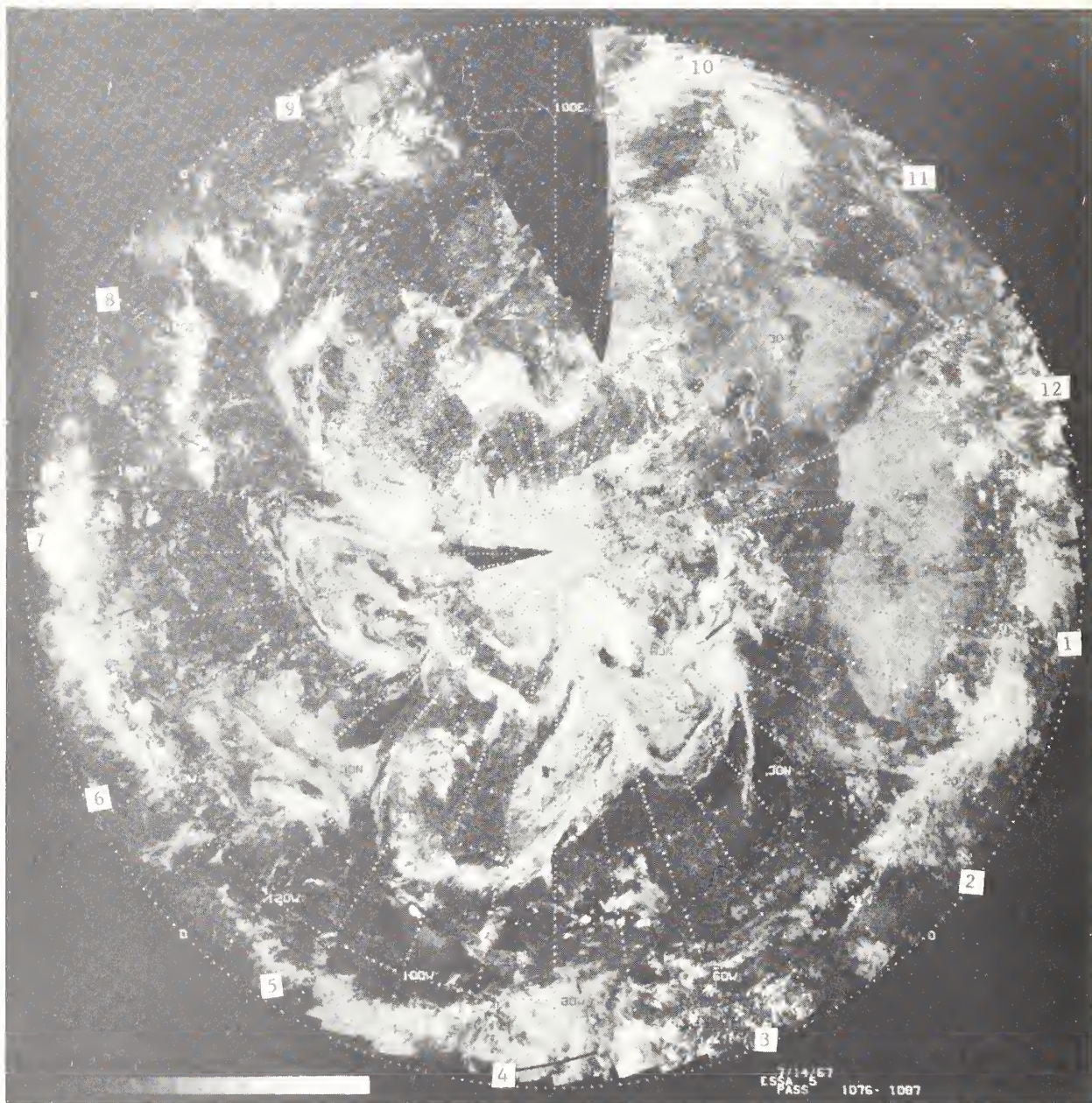


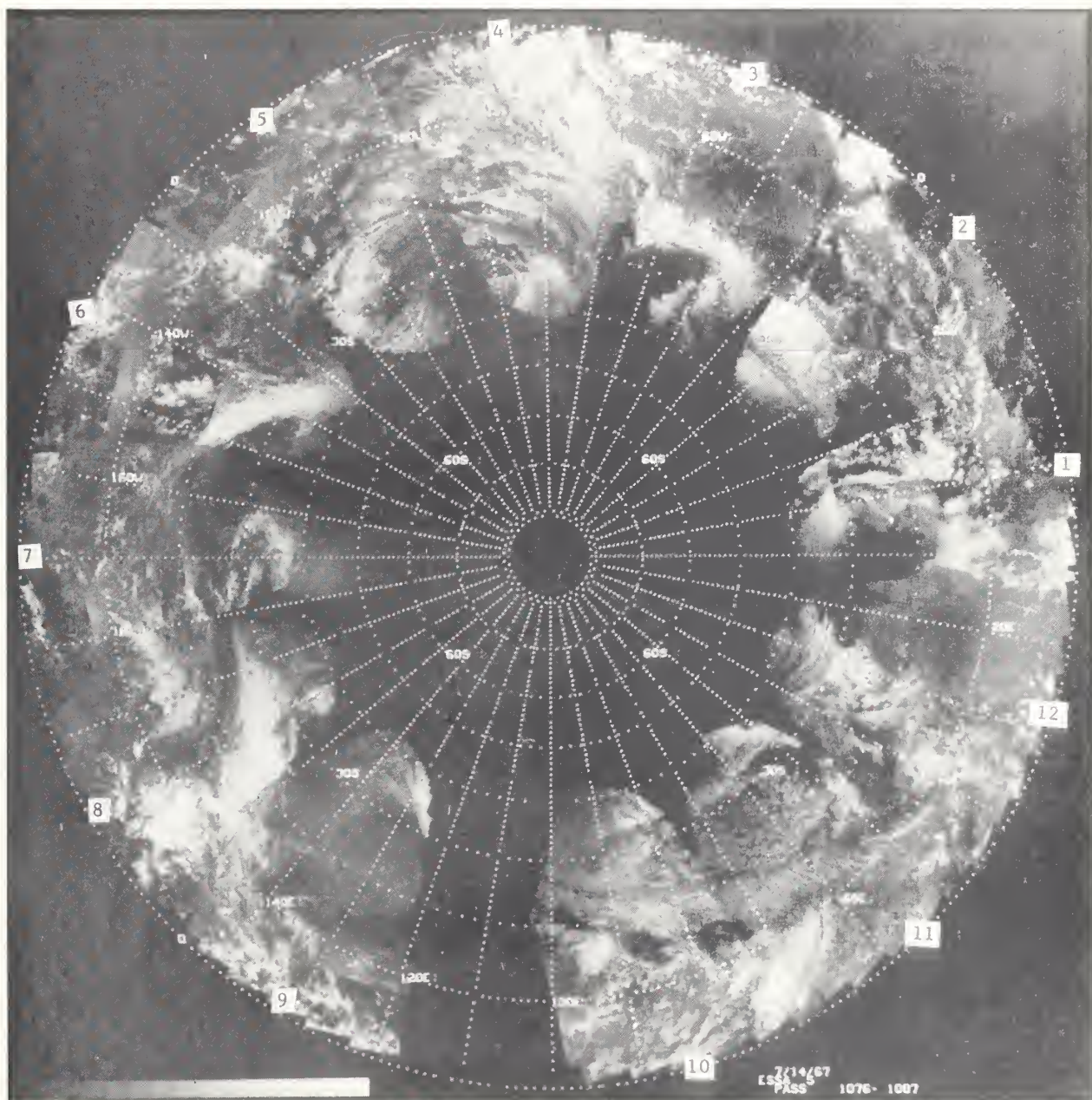


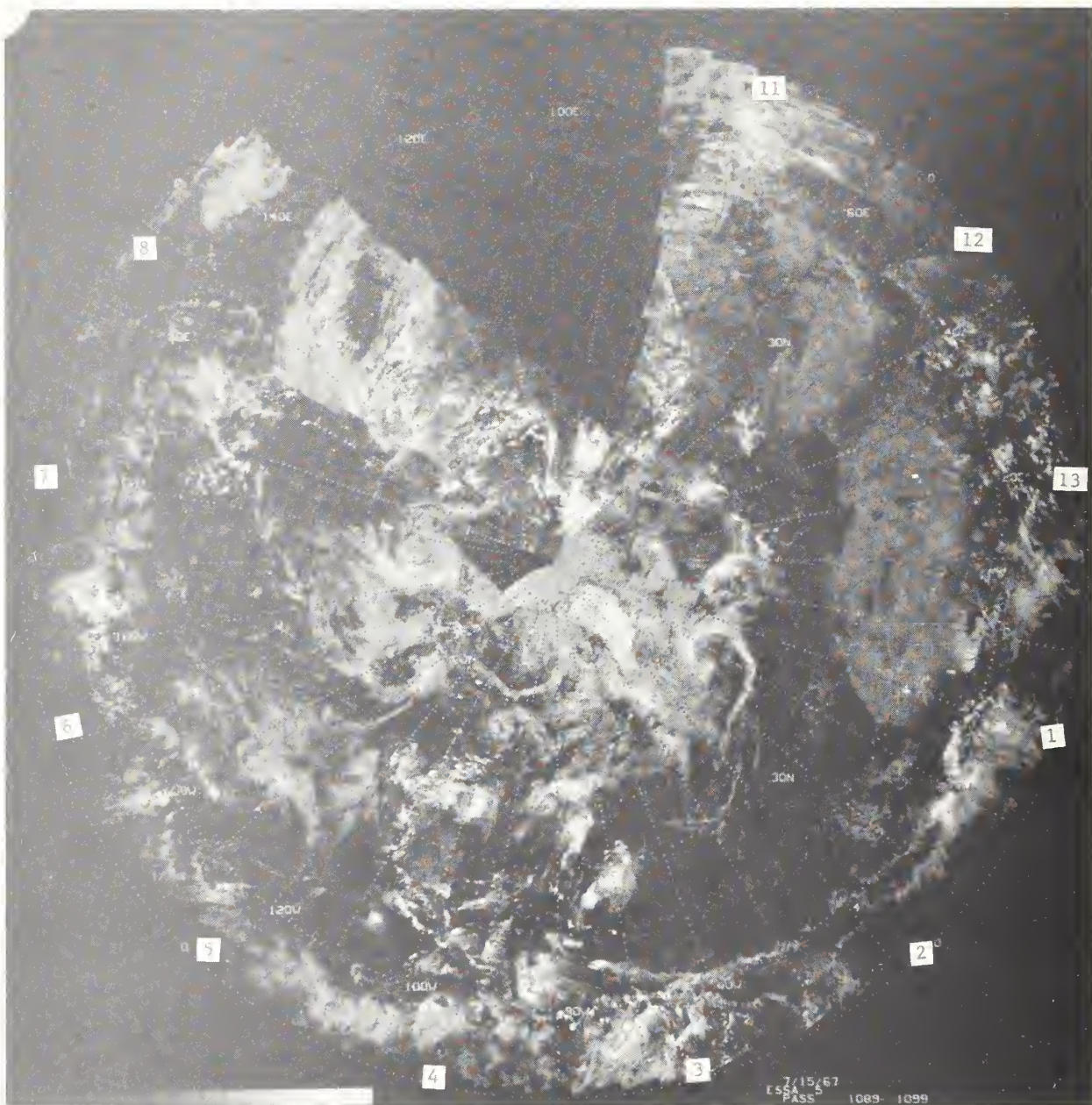




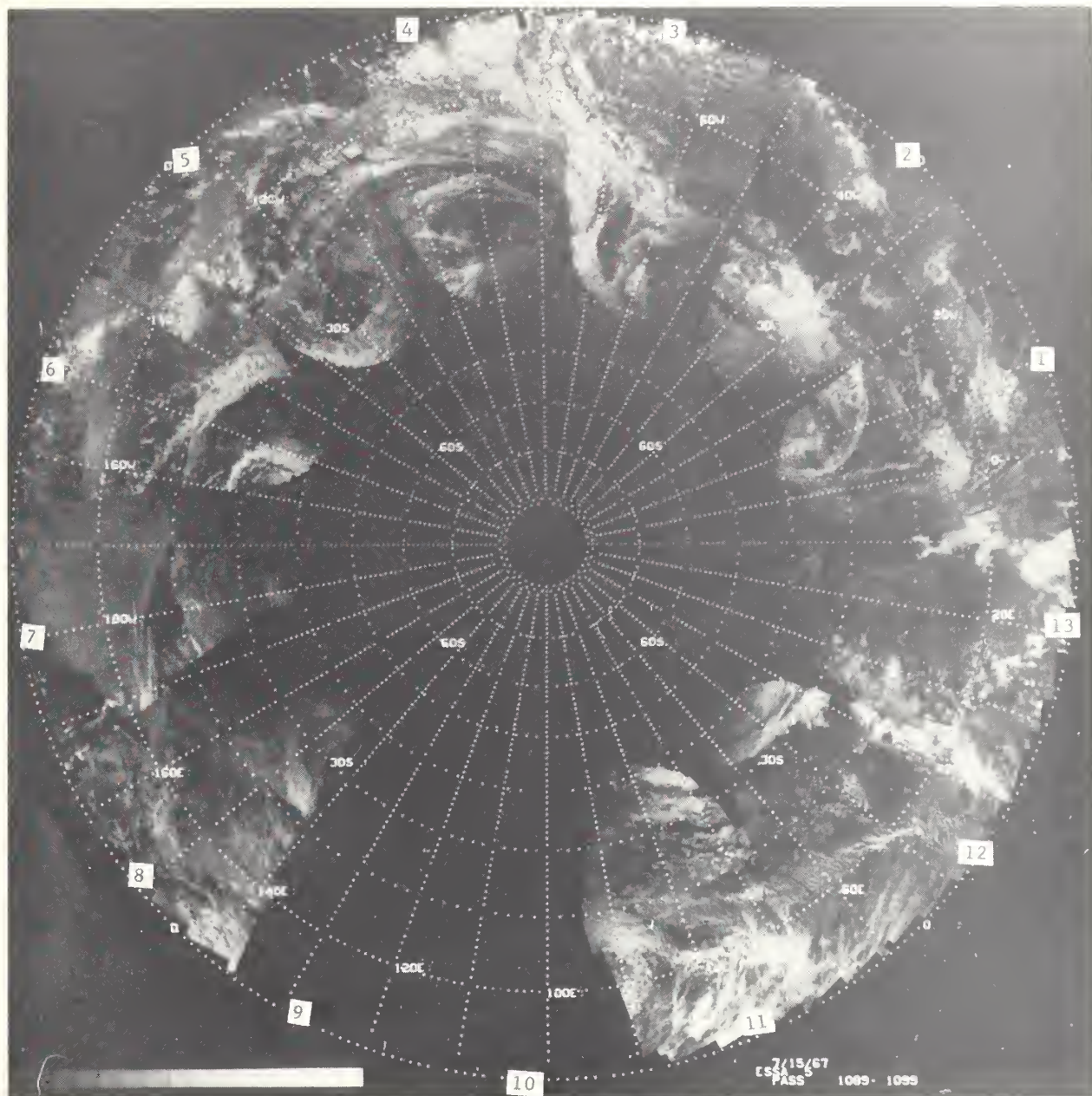


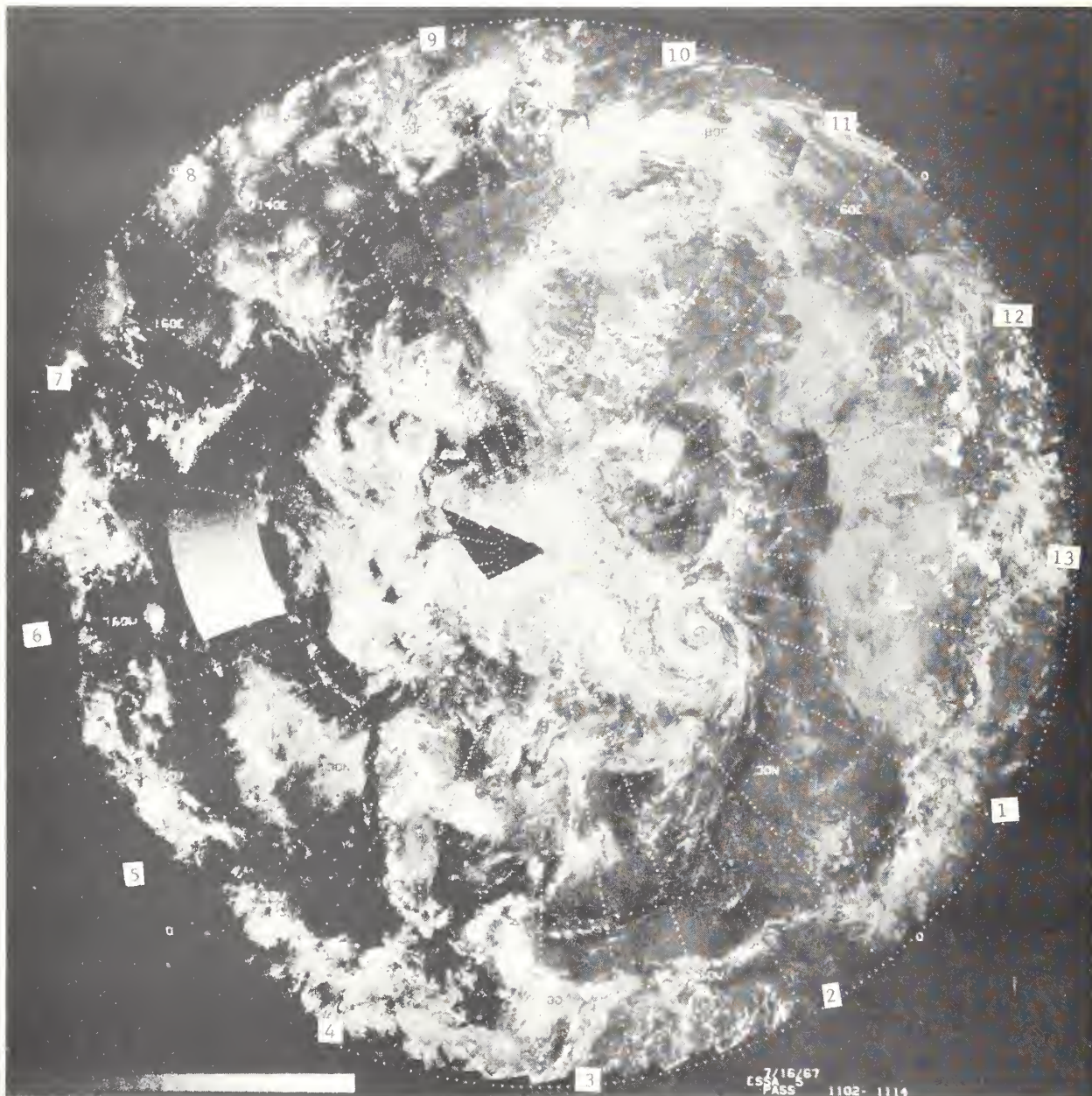


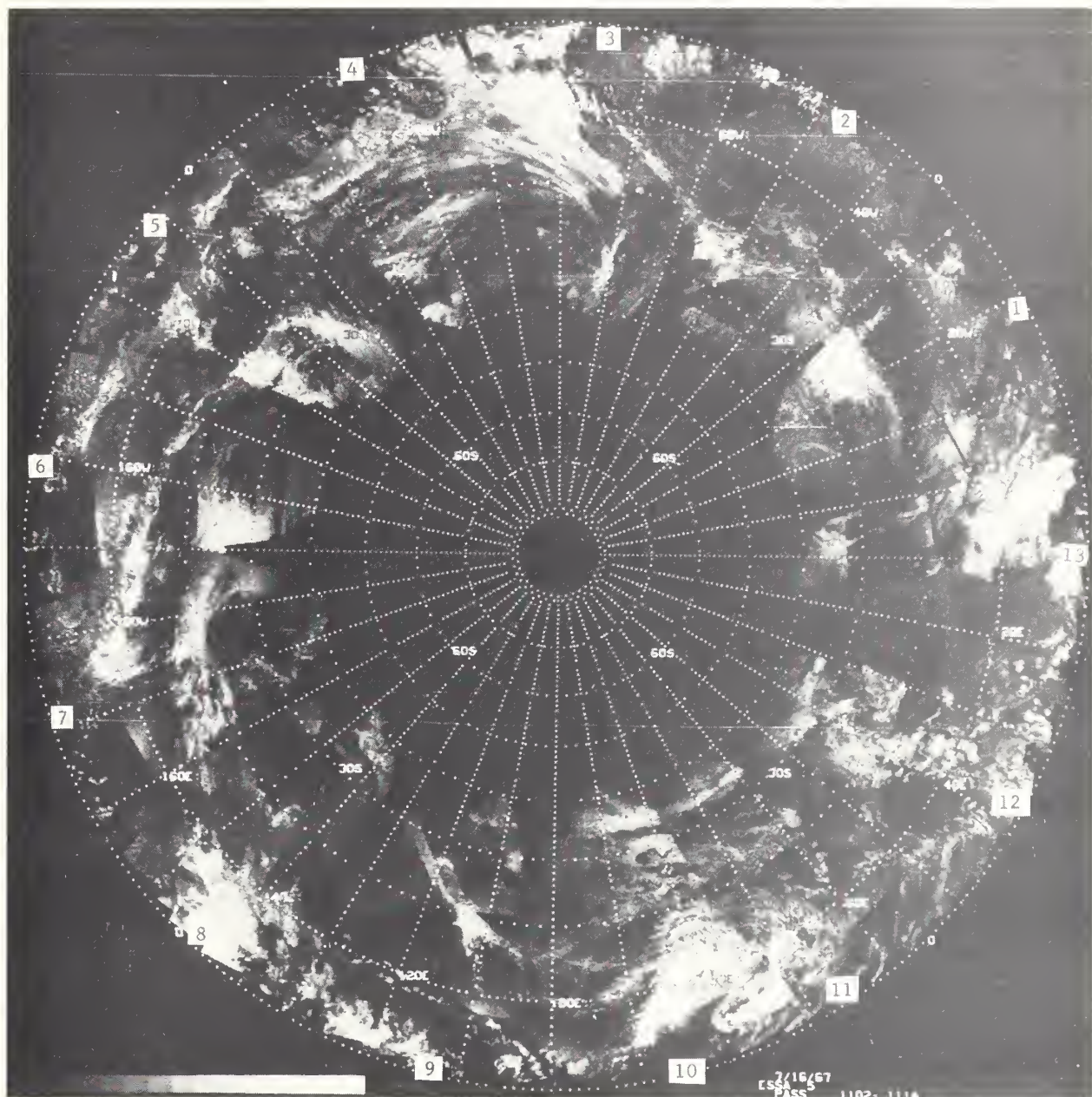


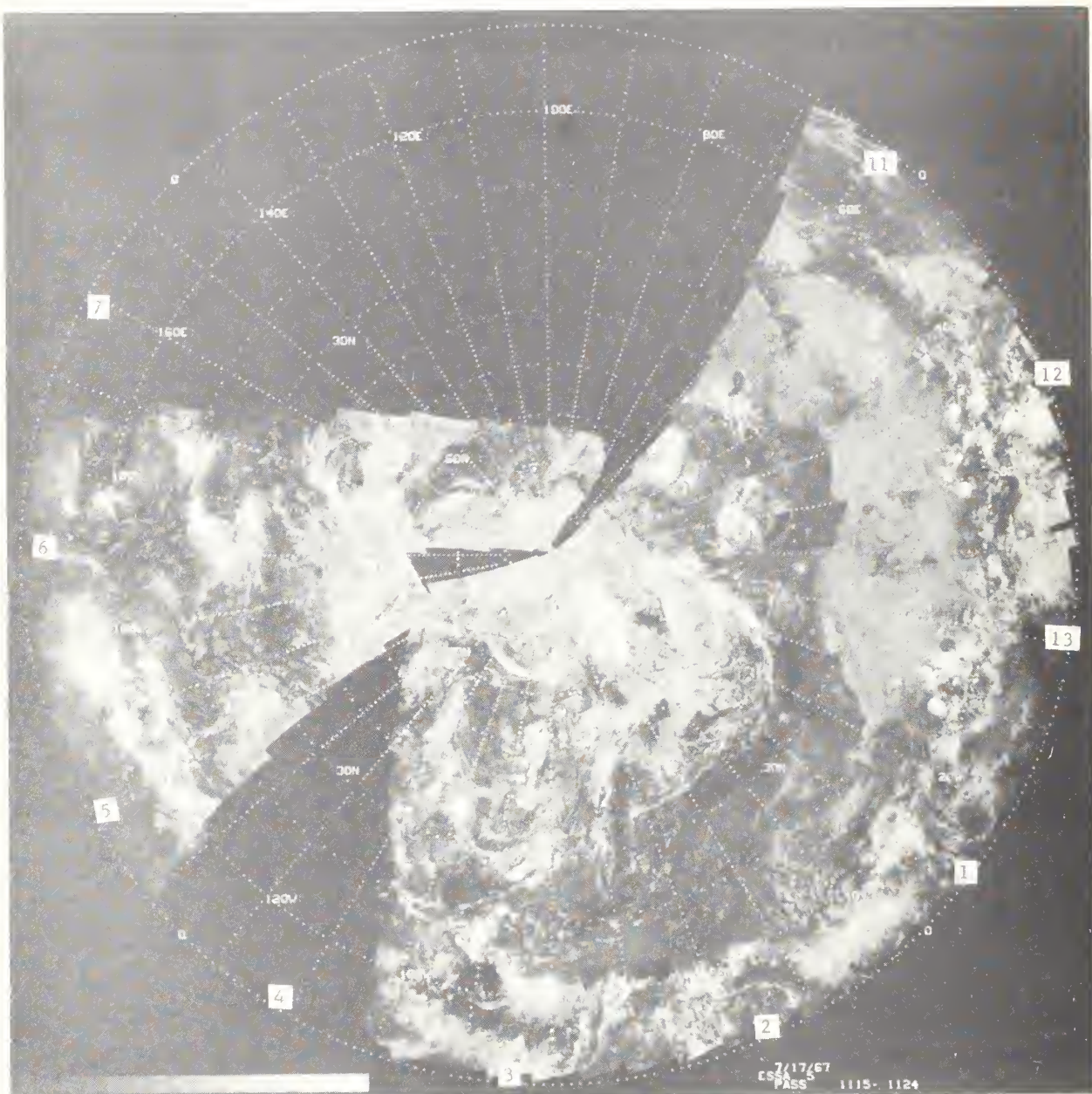


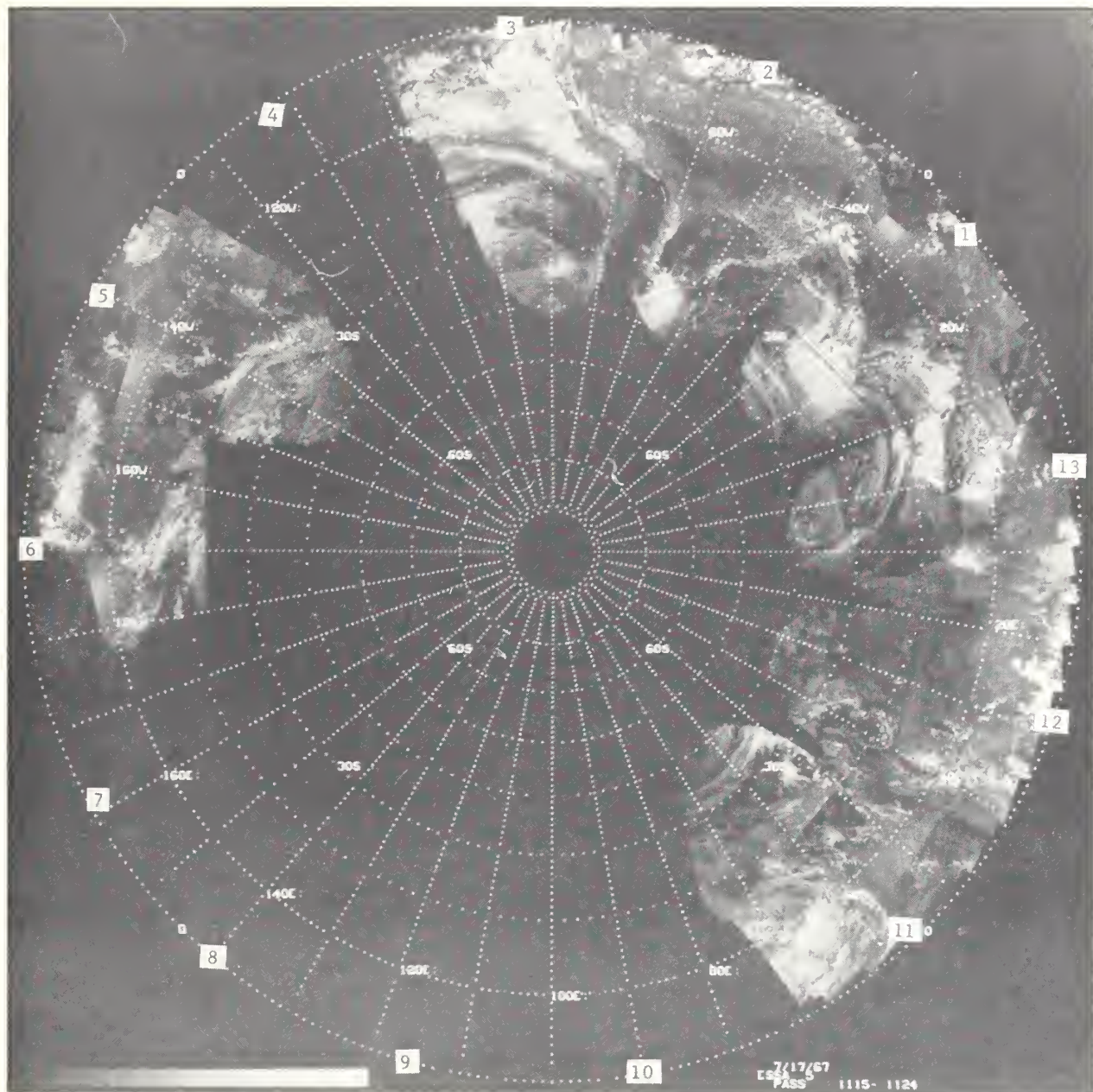
7/15/67
ESSA
PASS
1089-1099

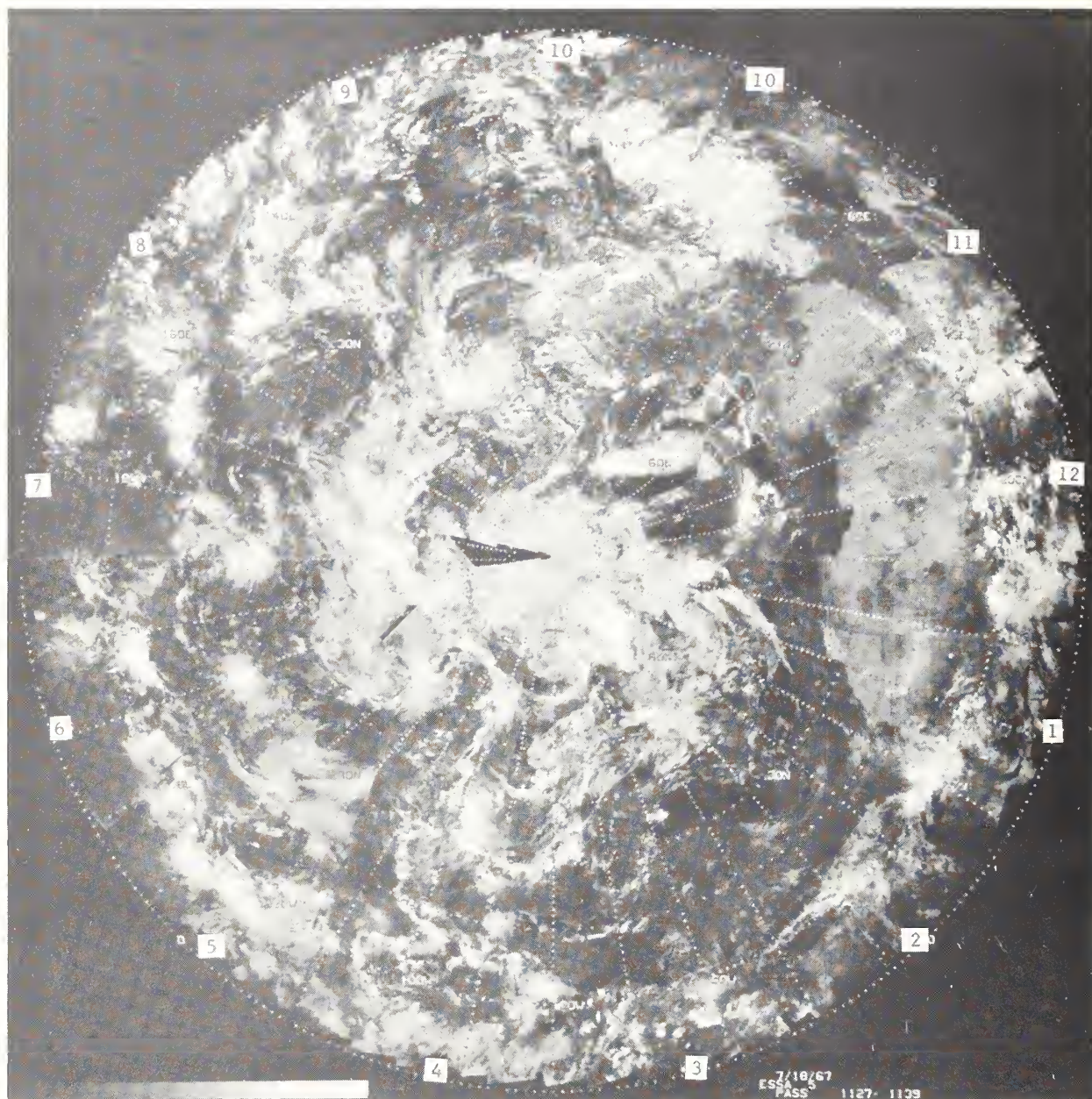


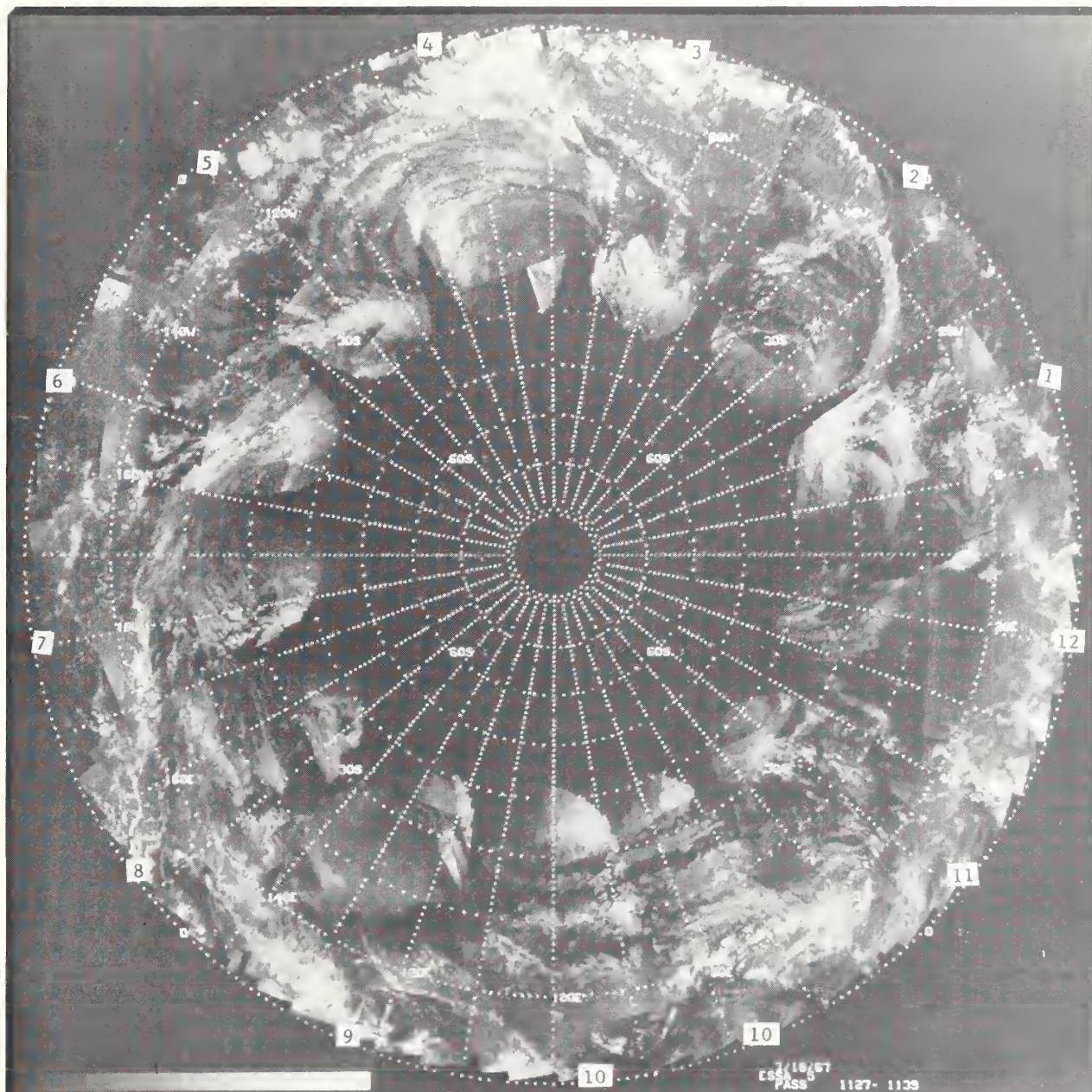


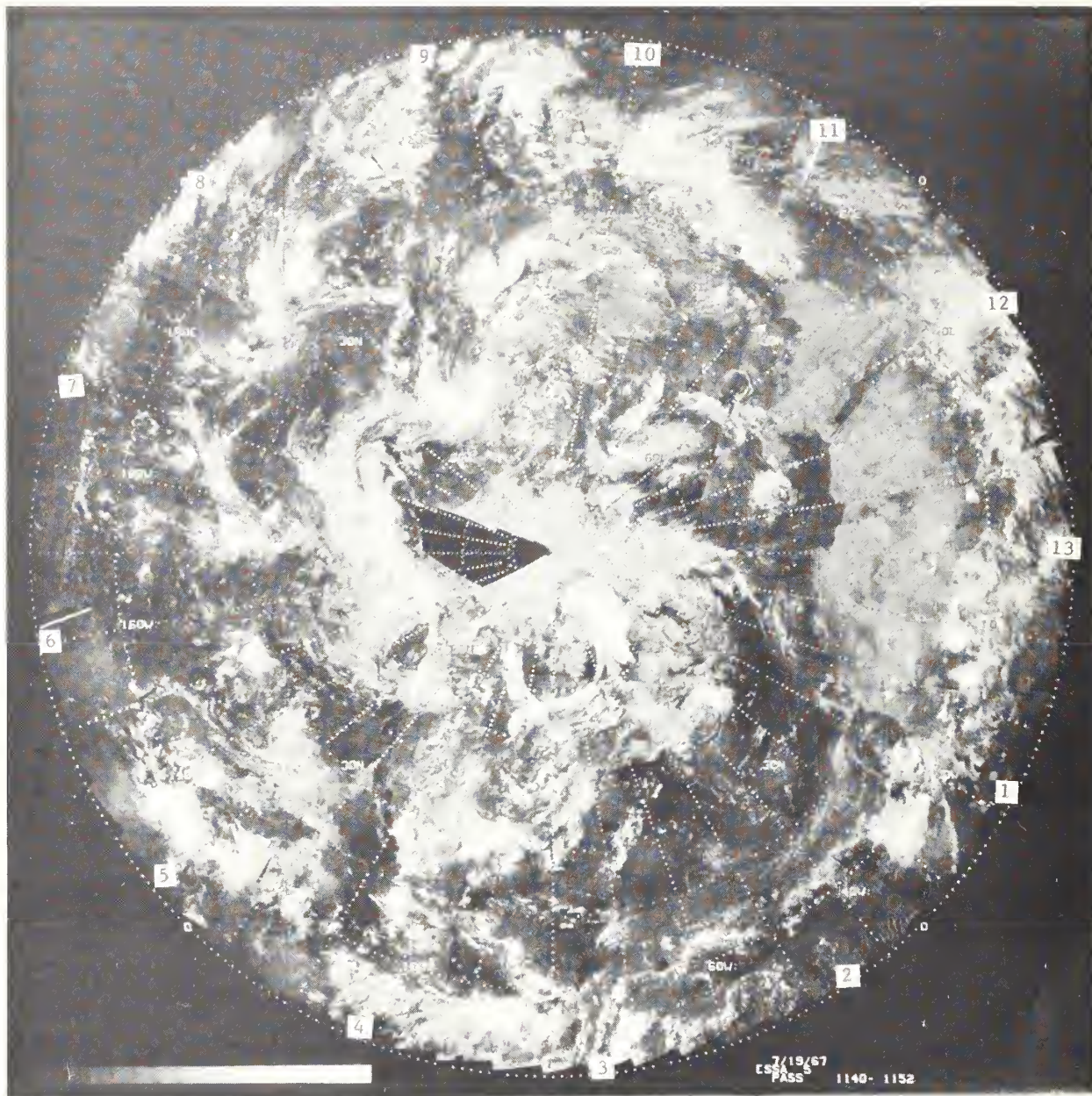


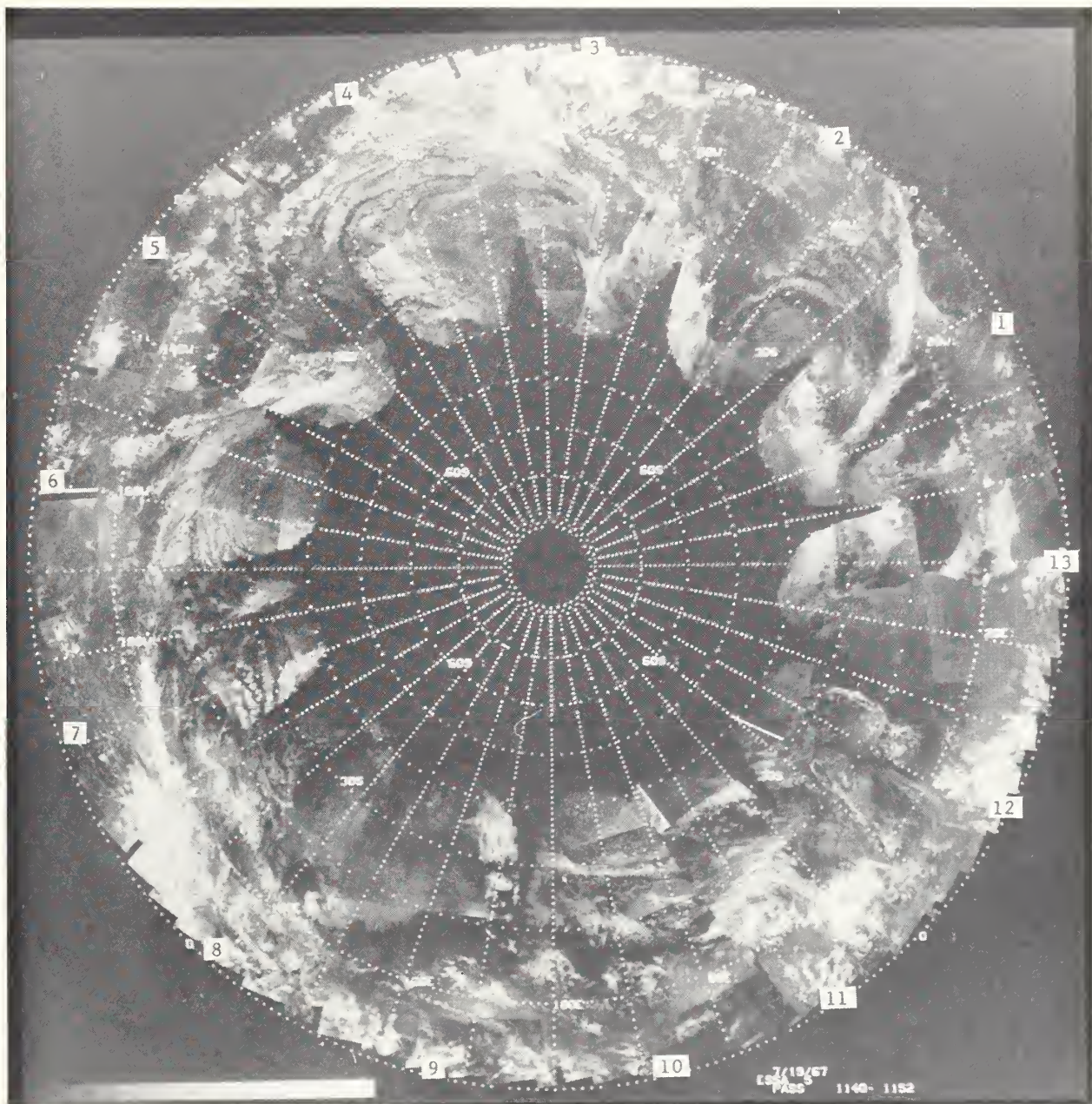


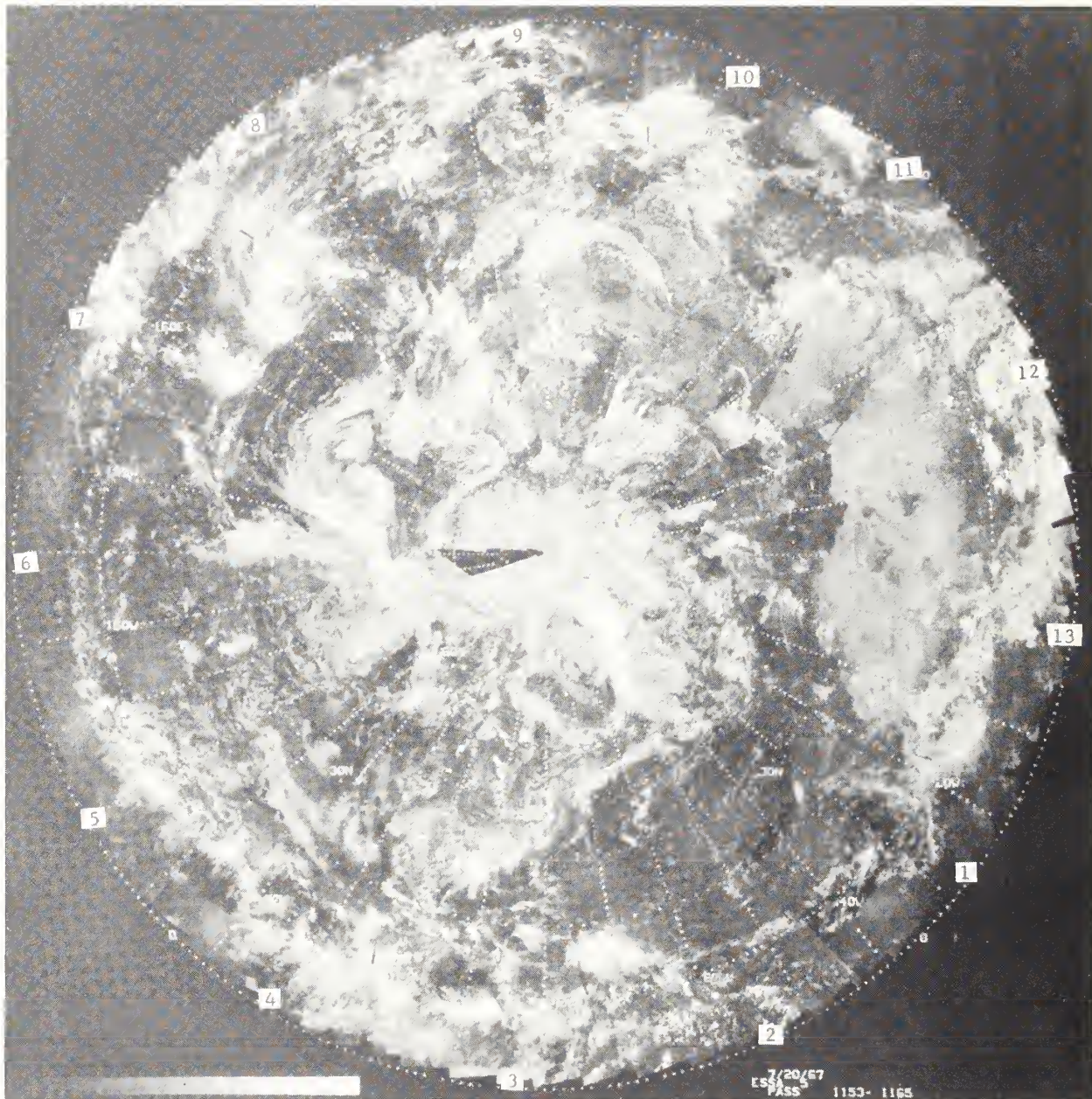


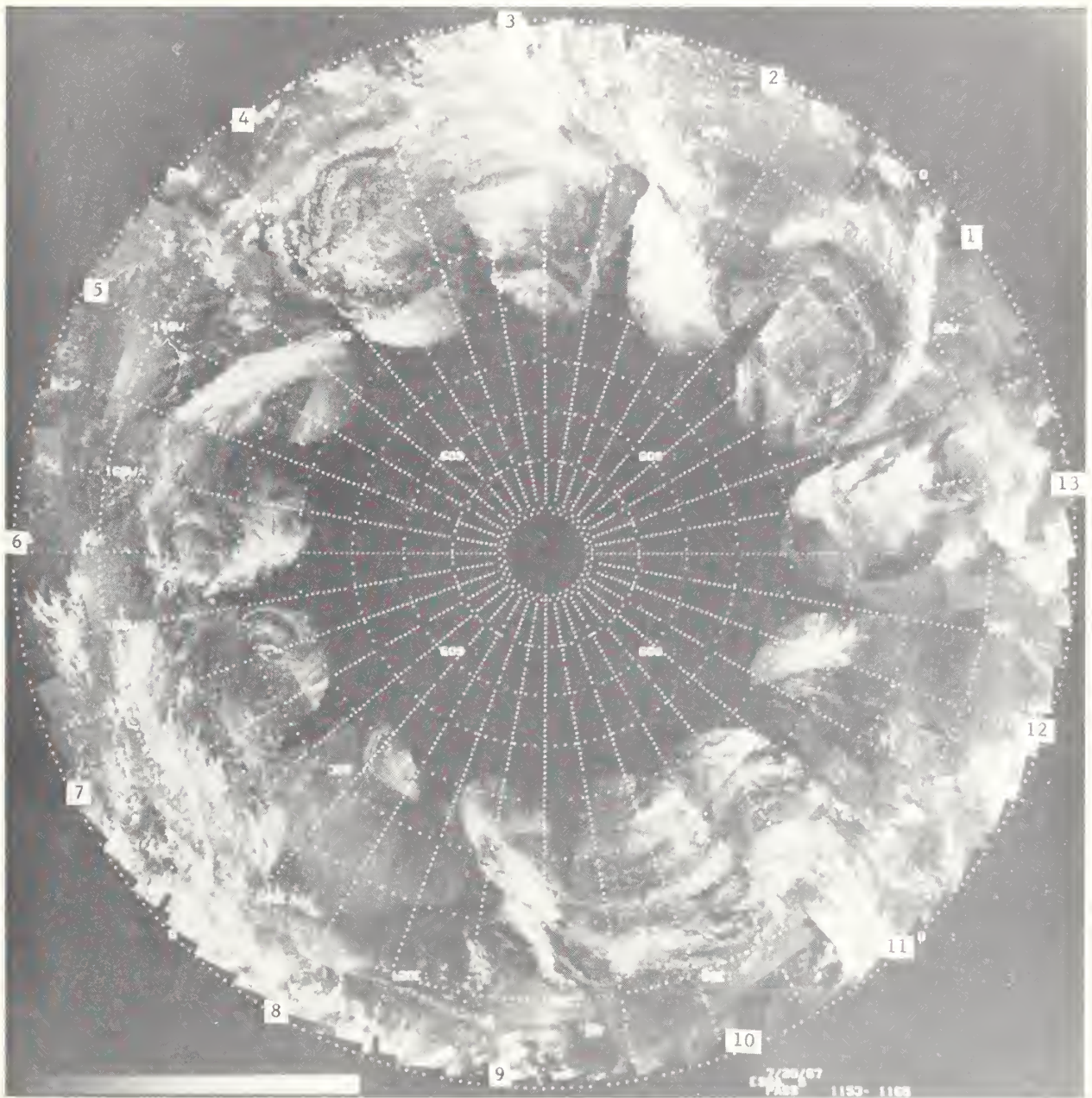


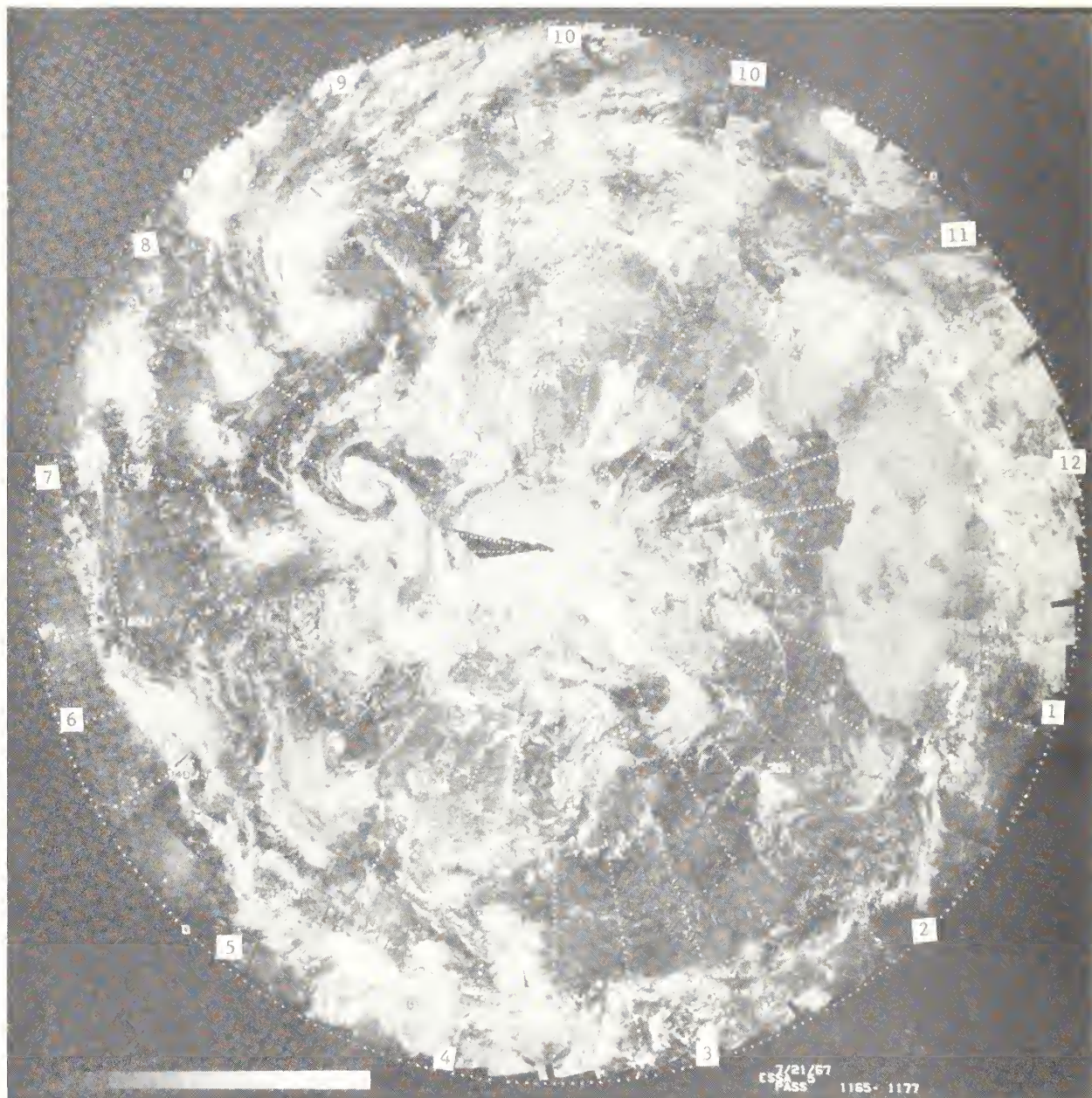


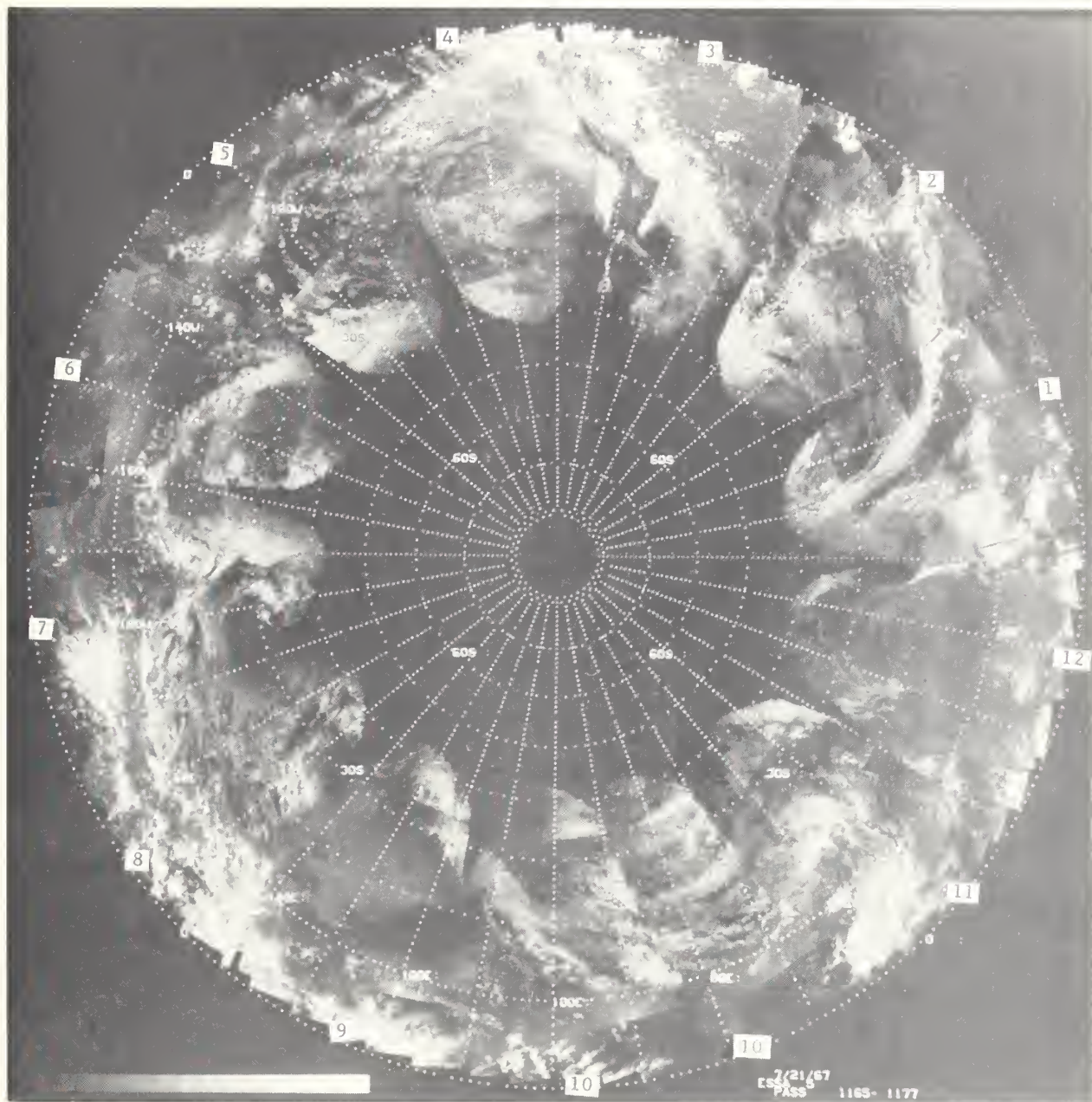


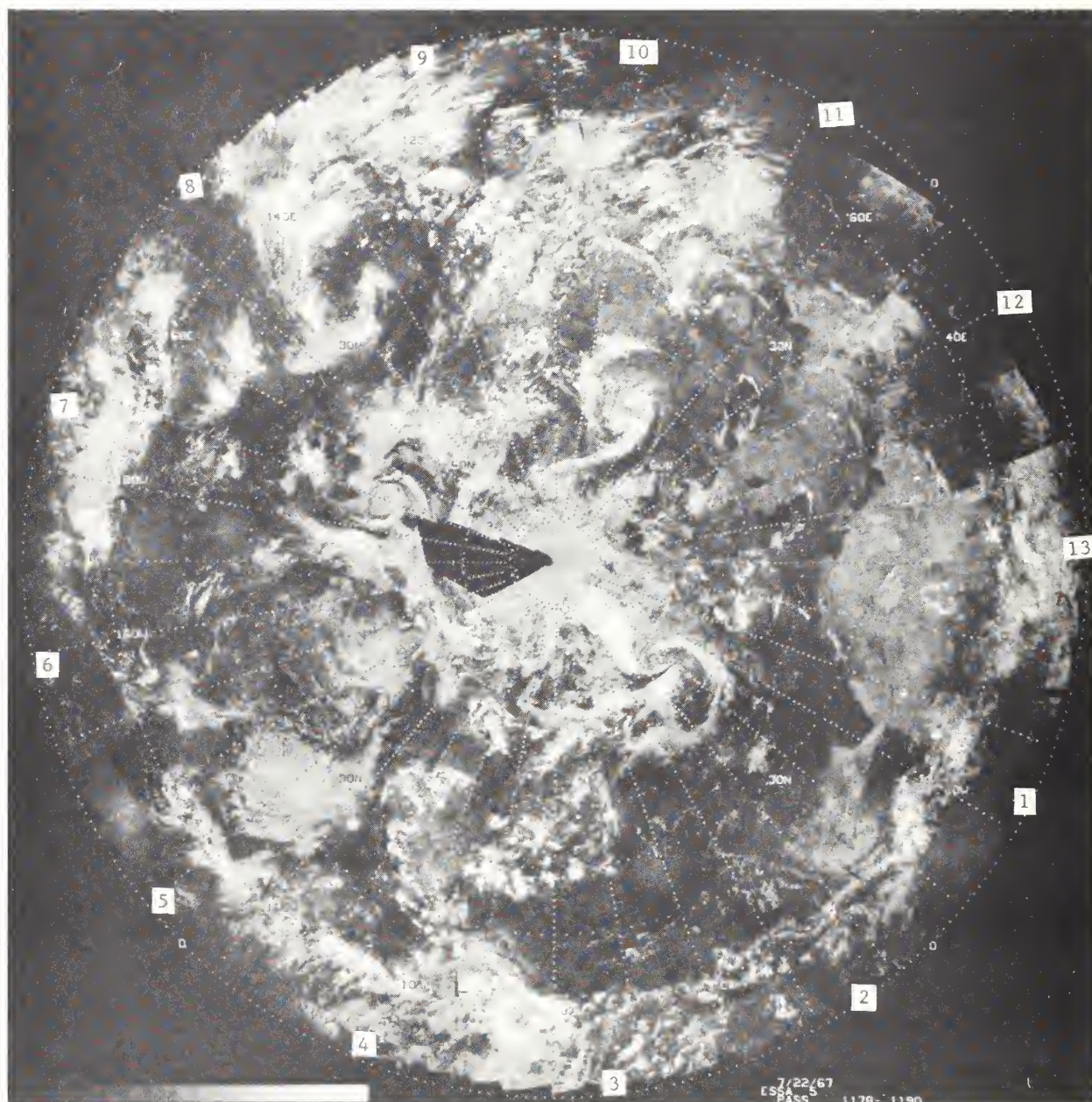


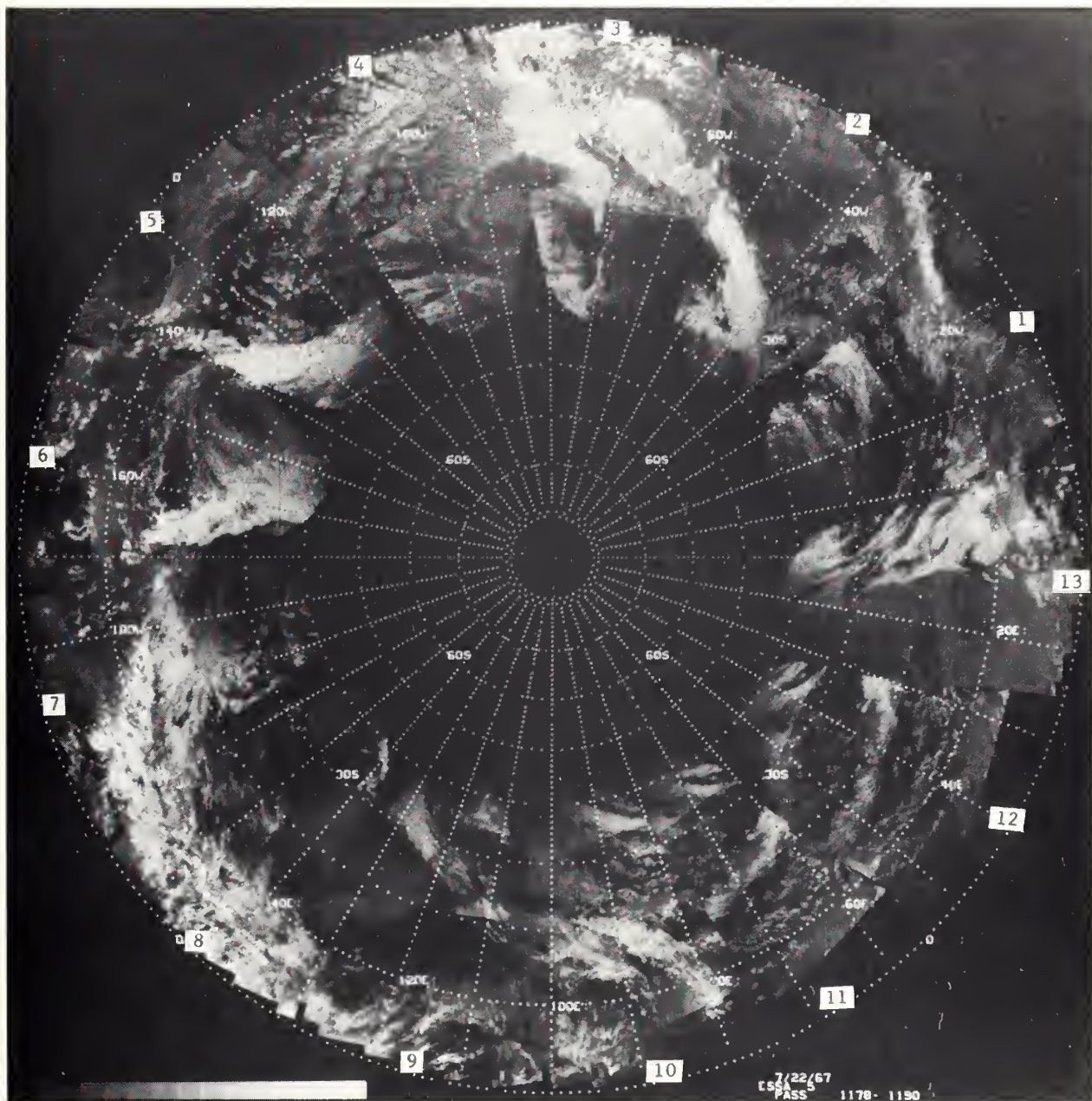


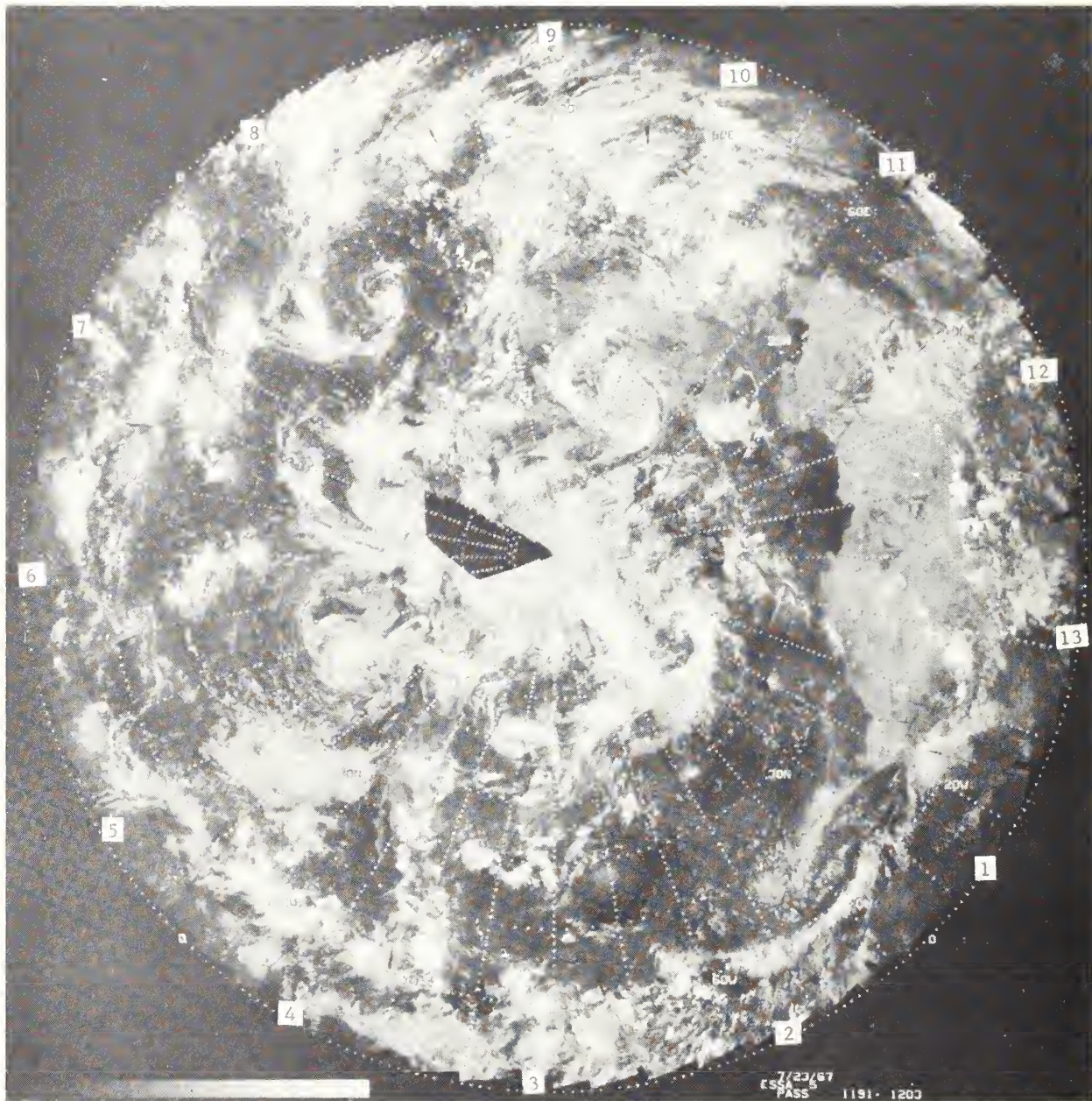


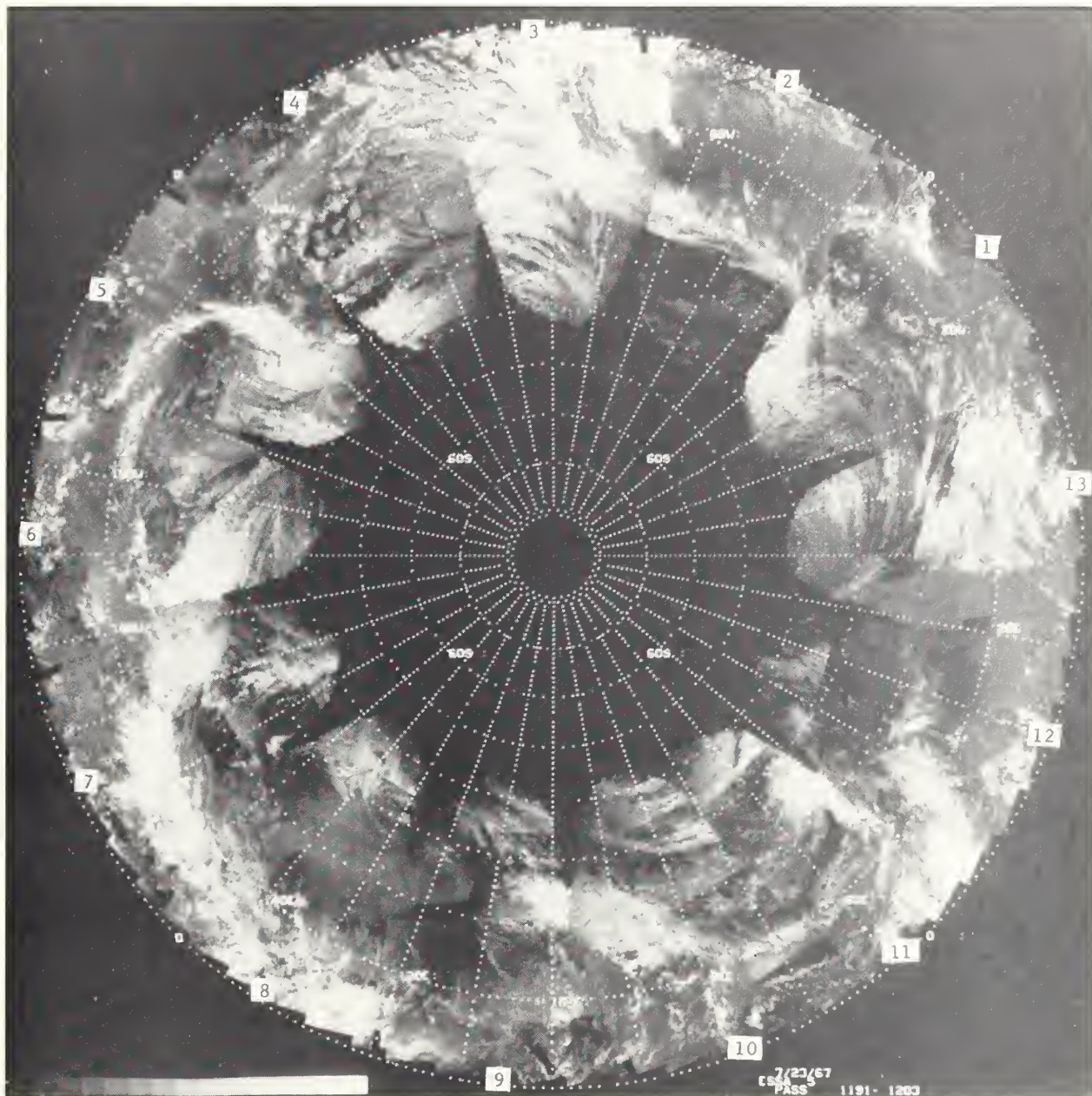


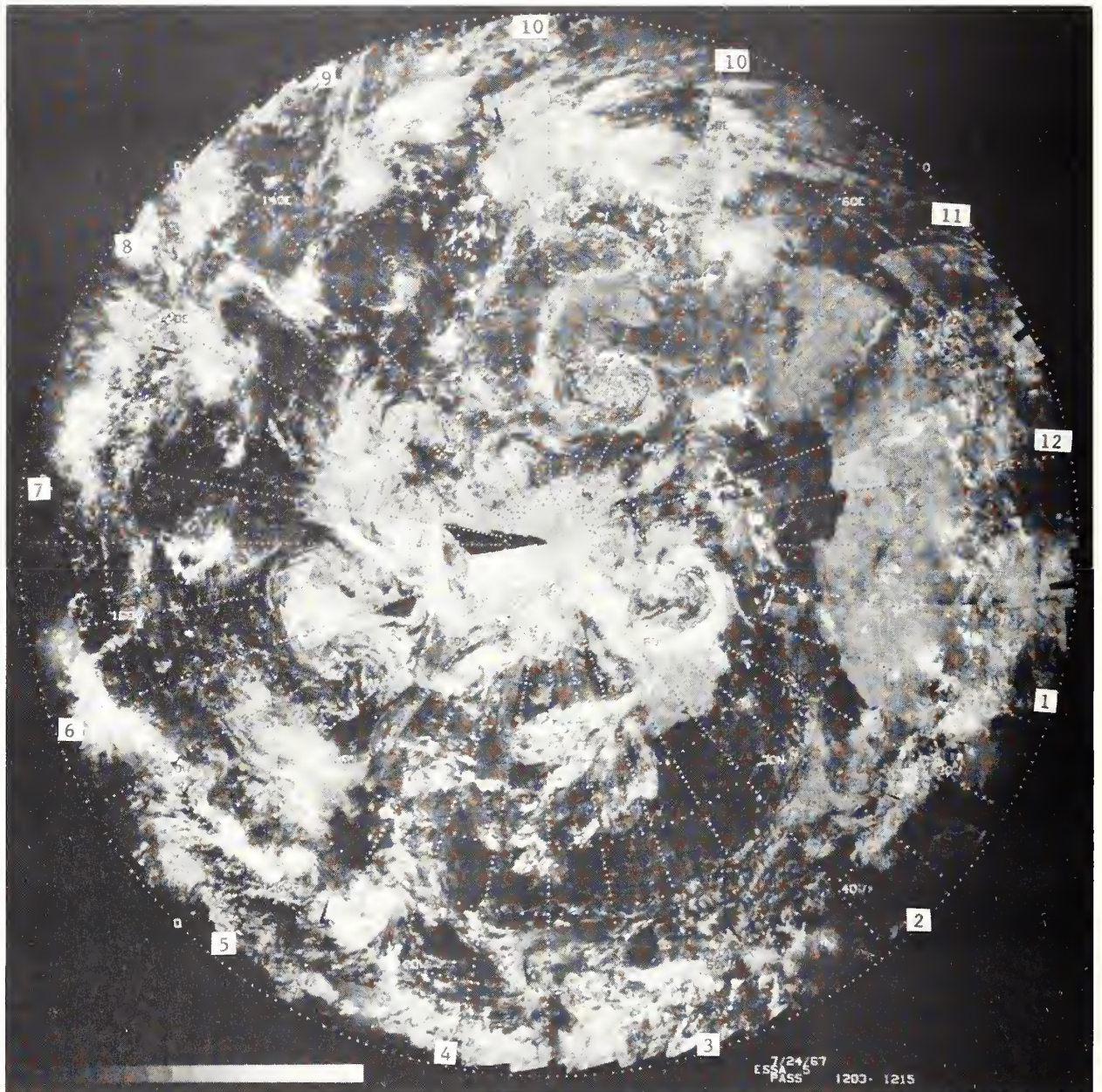


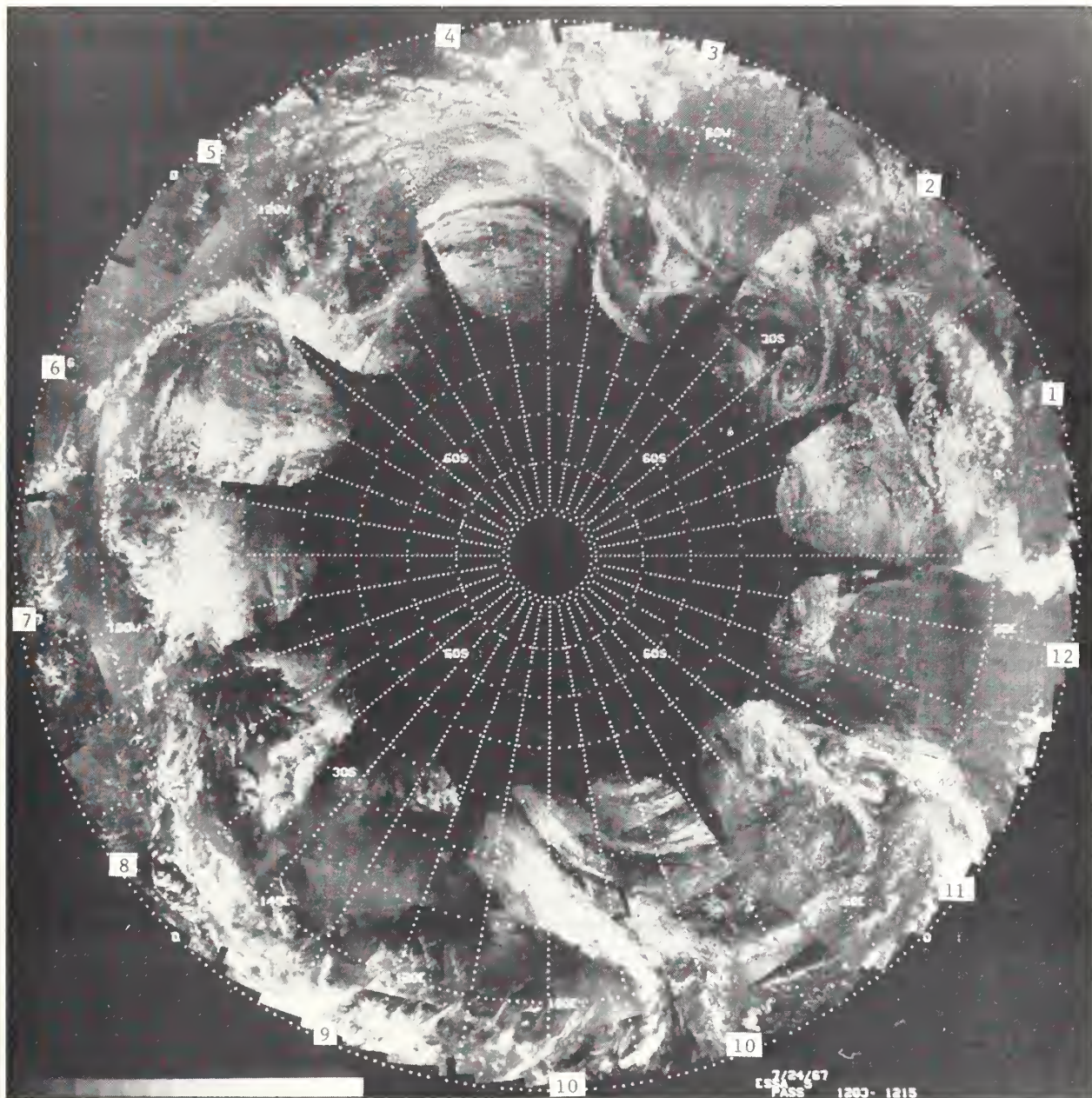


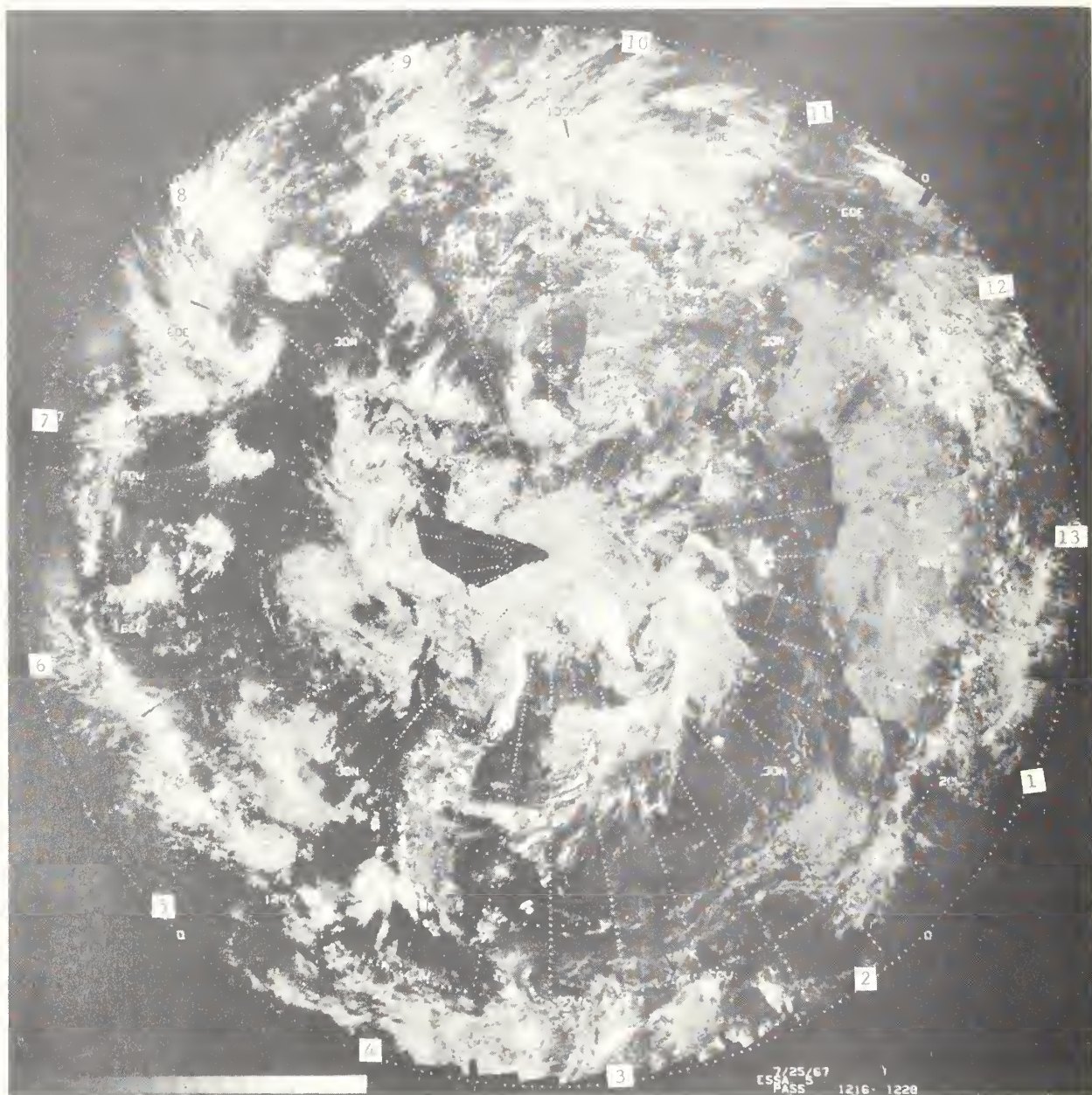




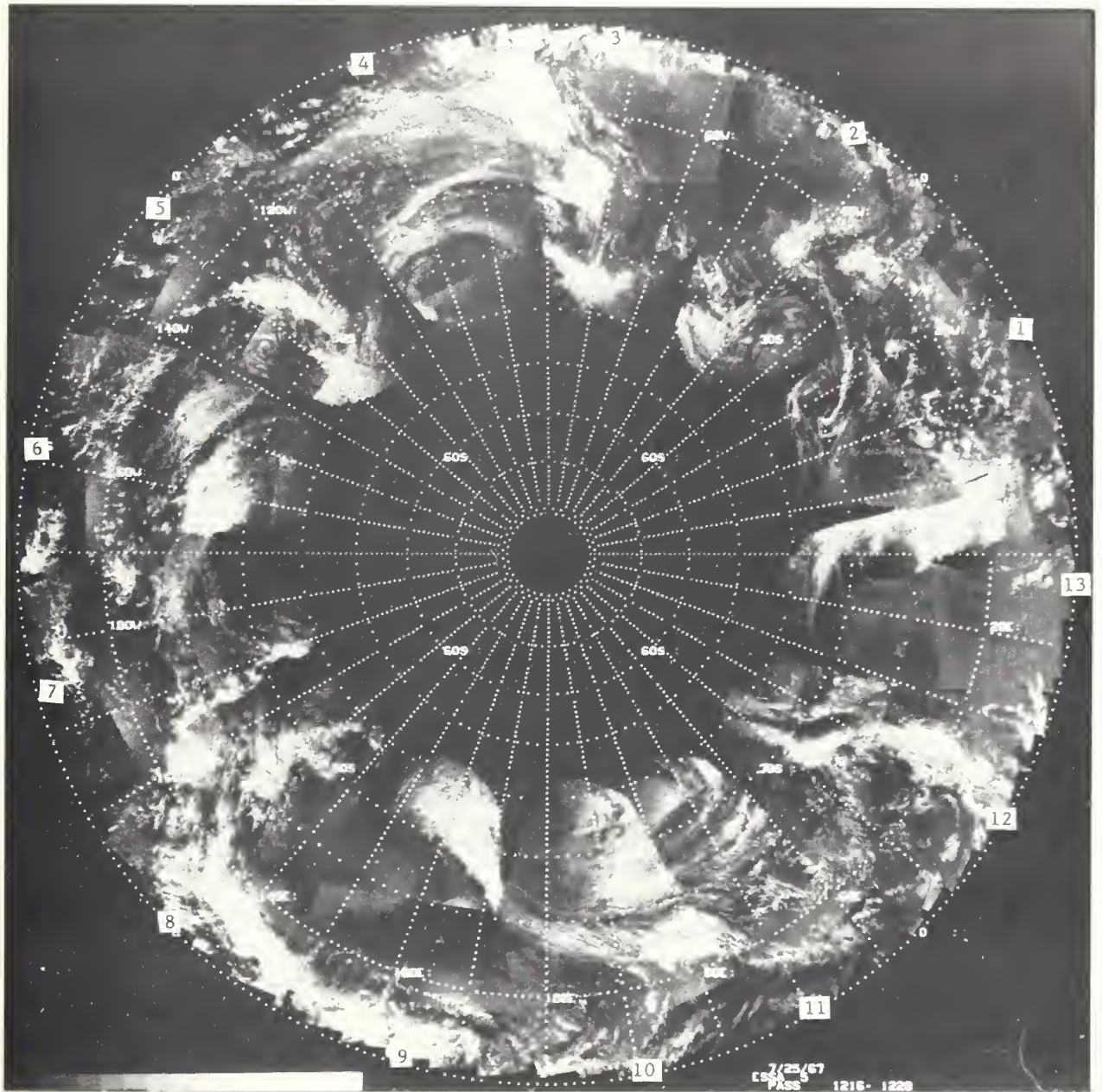


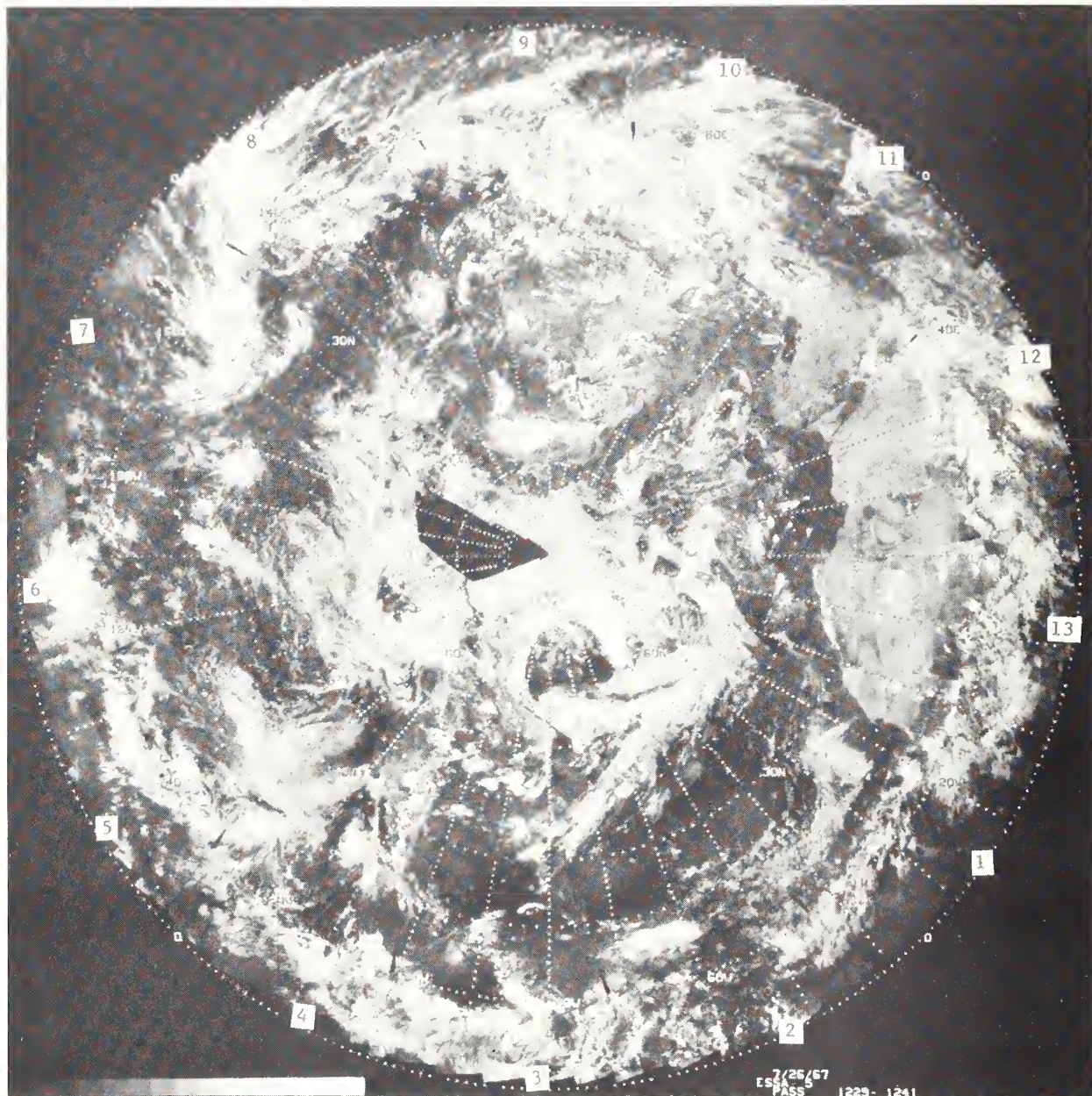


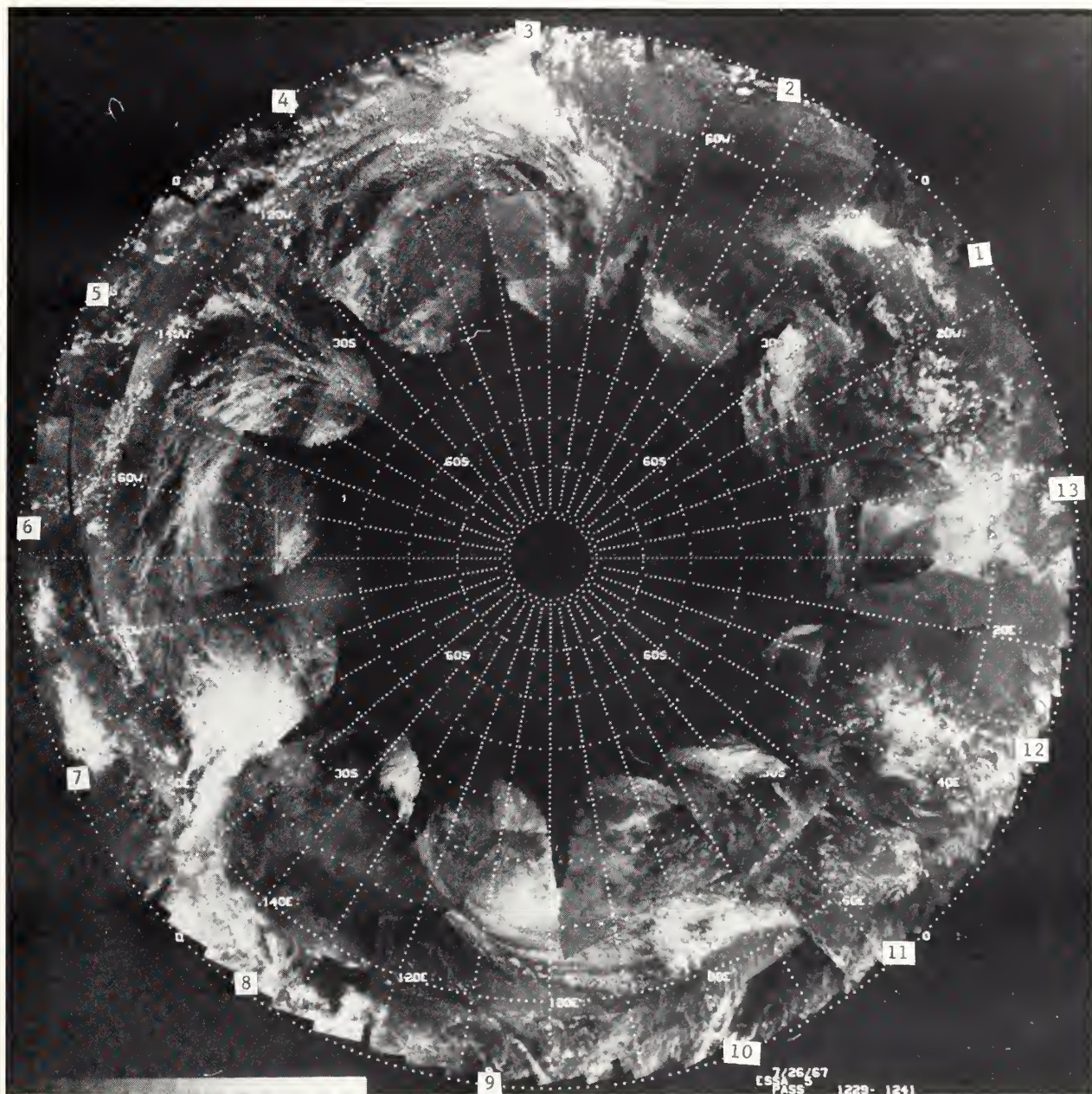


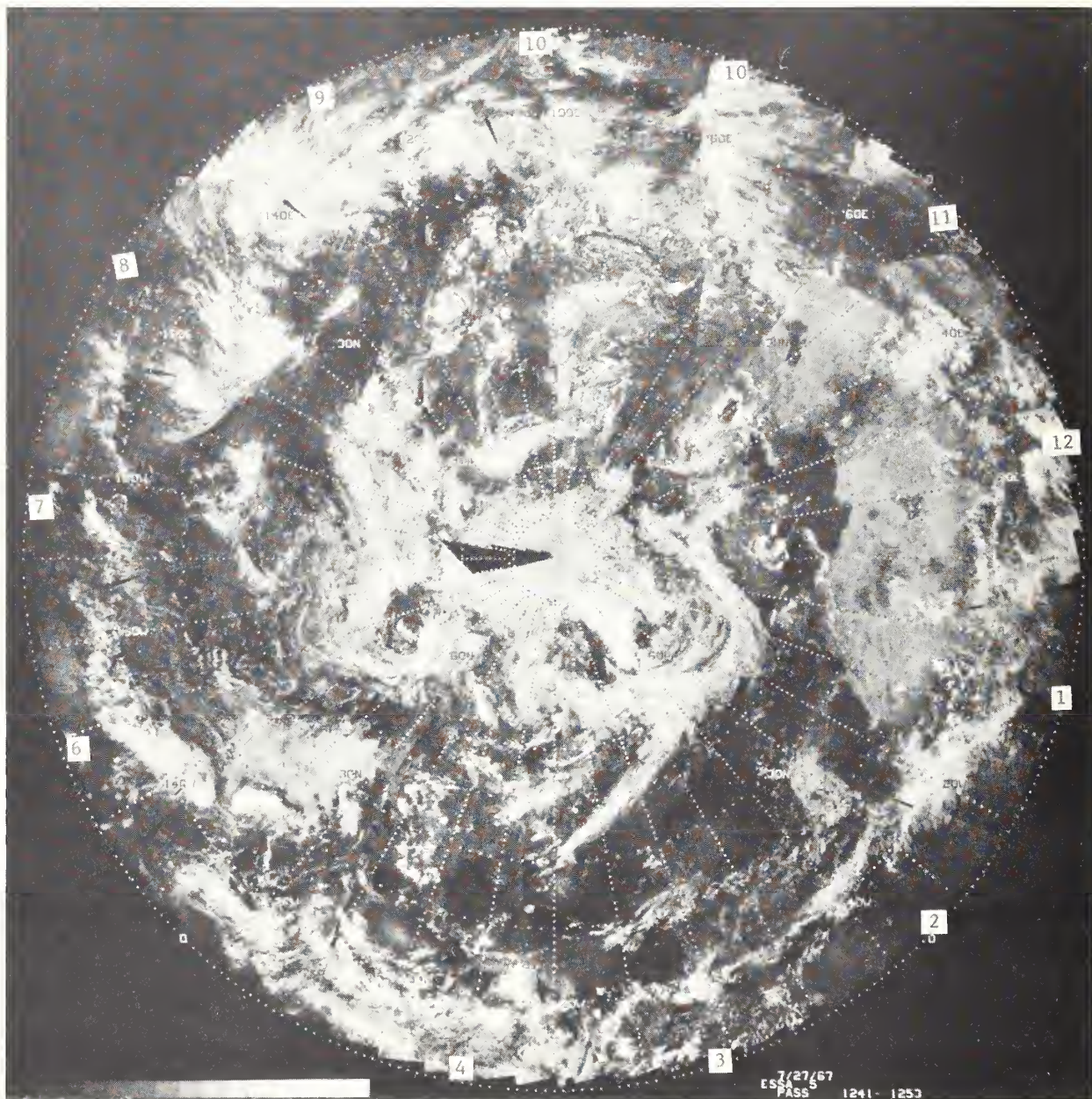


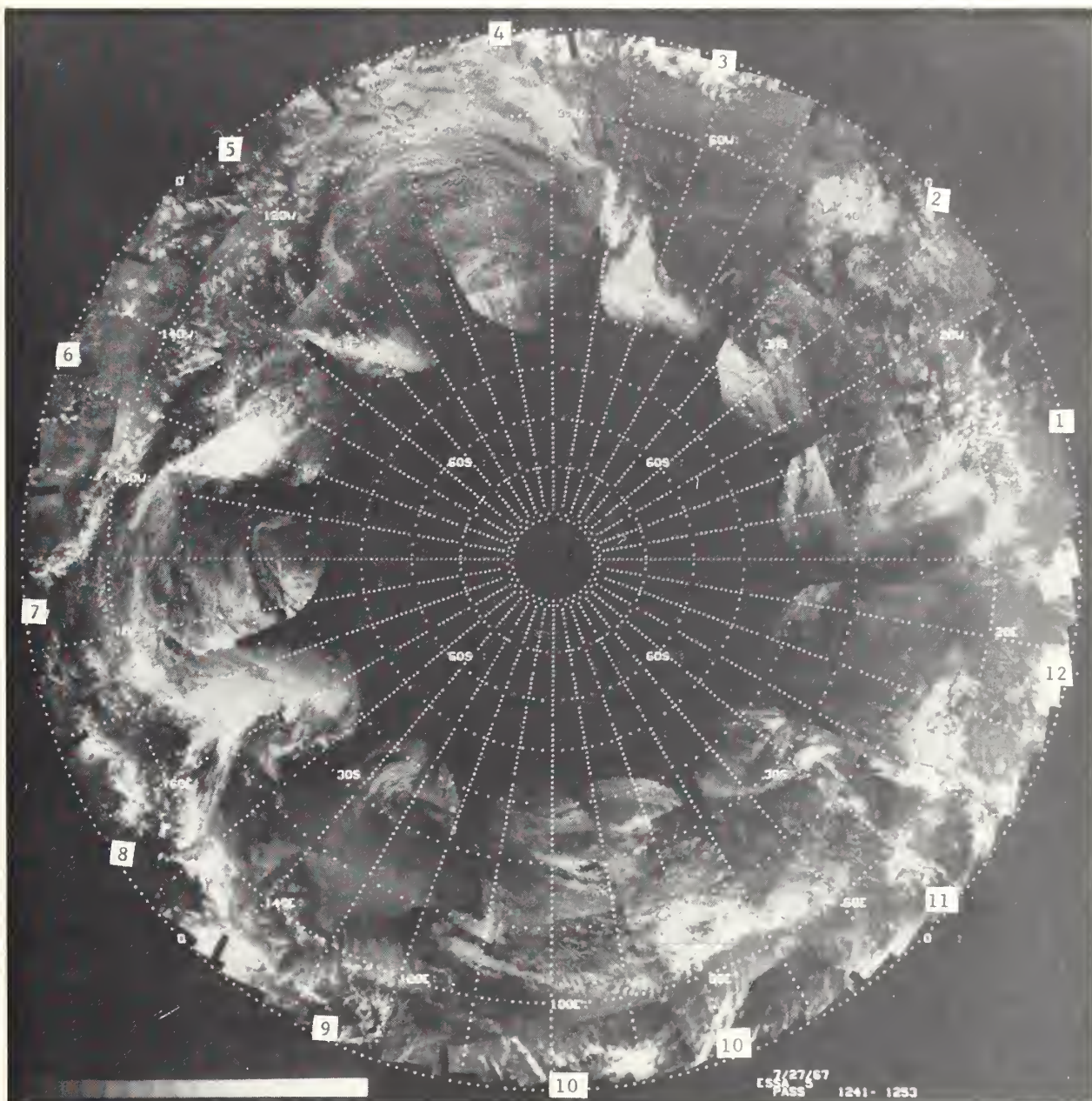
7/25/67
ESSA 5
PASS 1216-1228

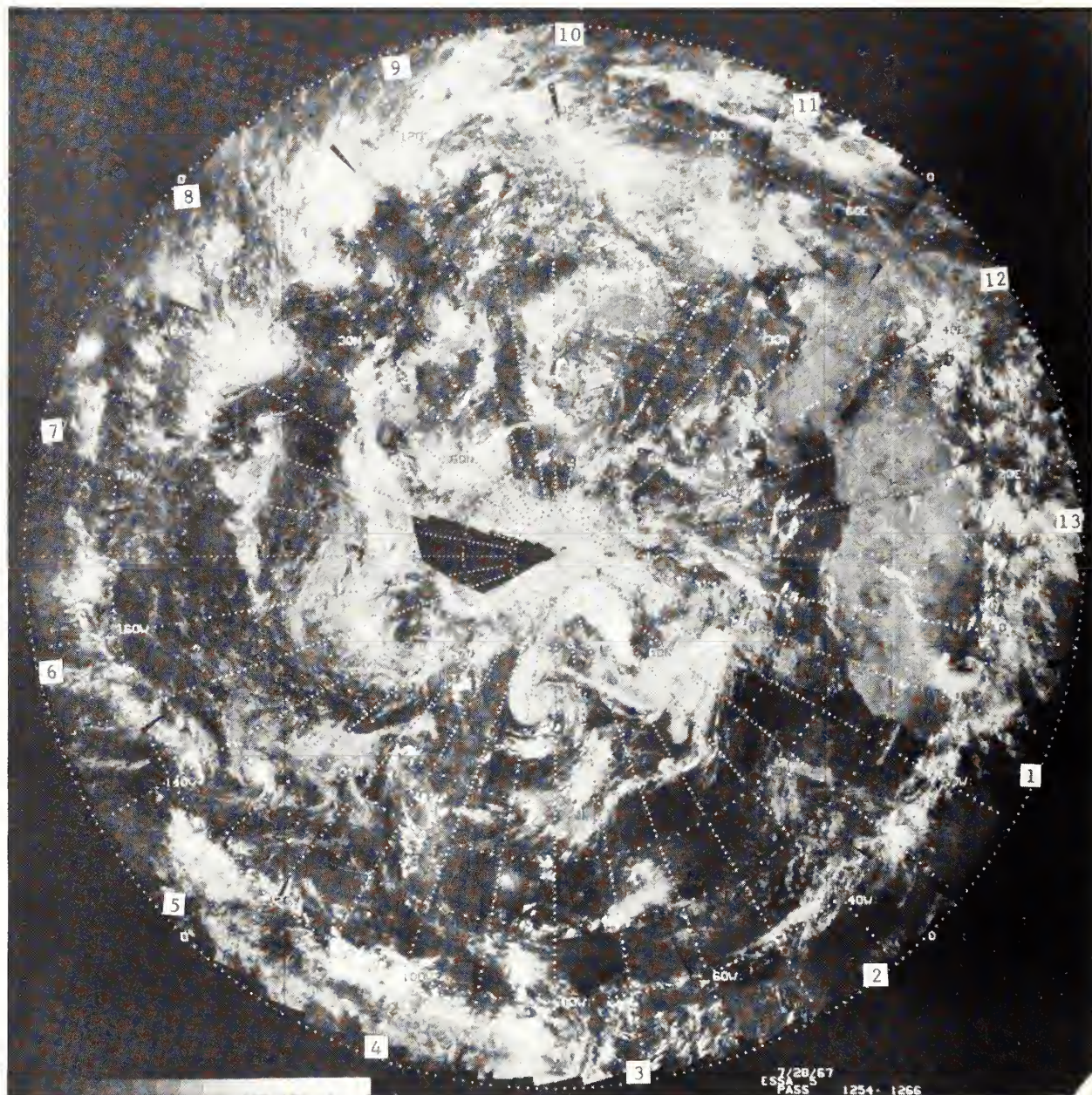












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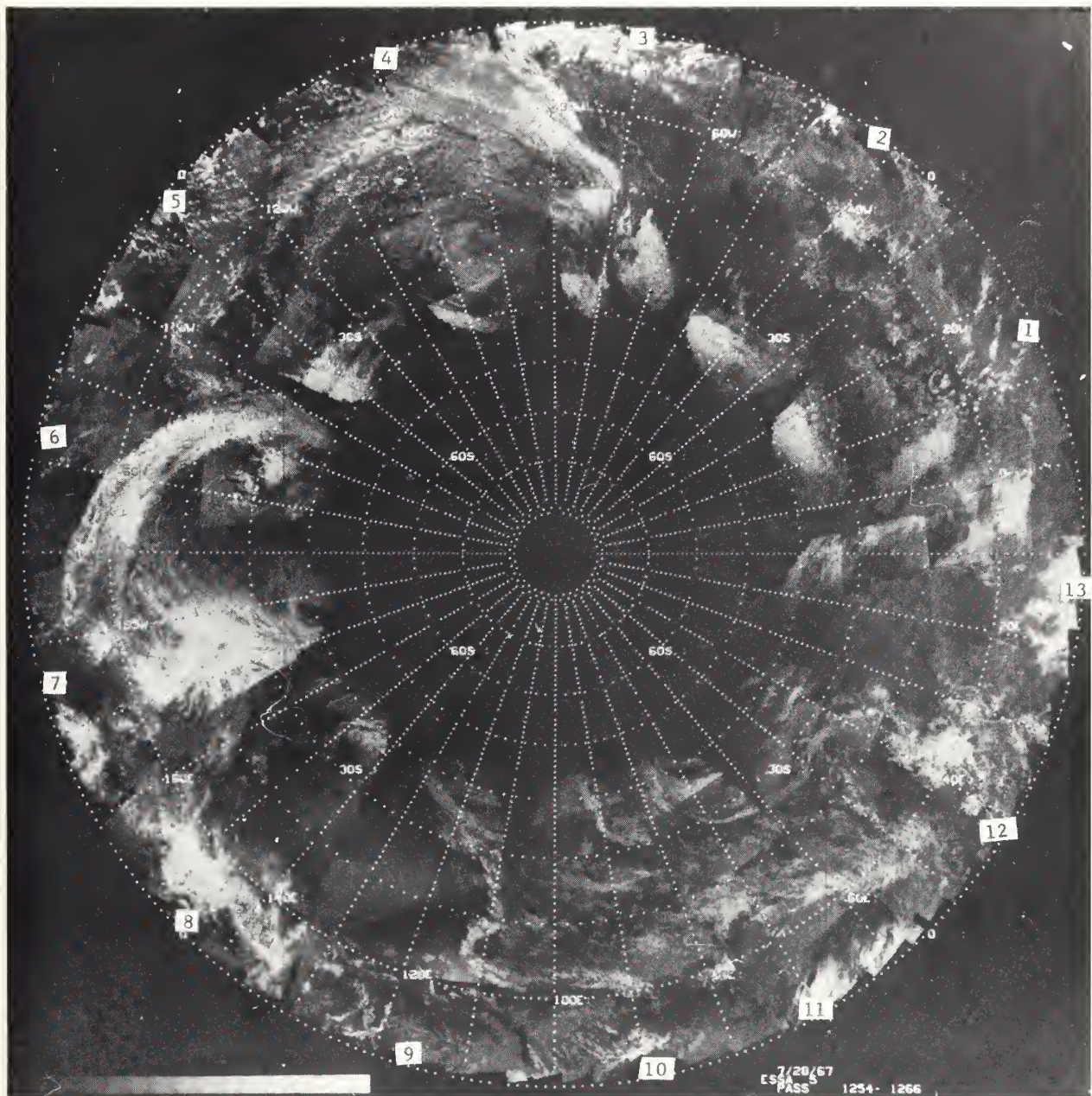
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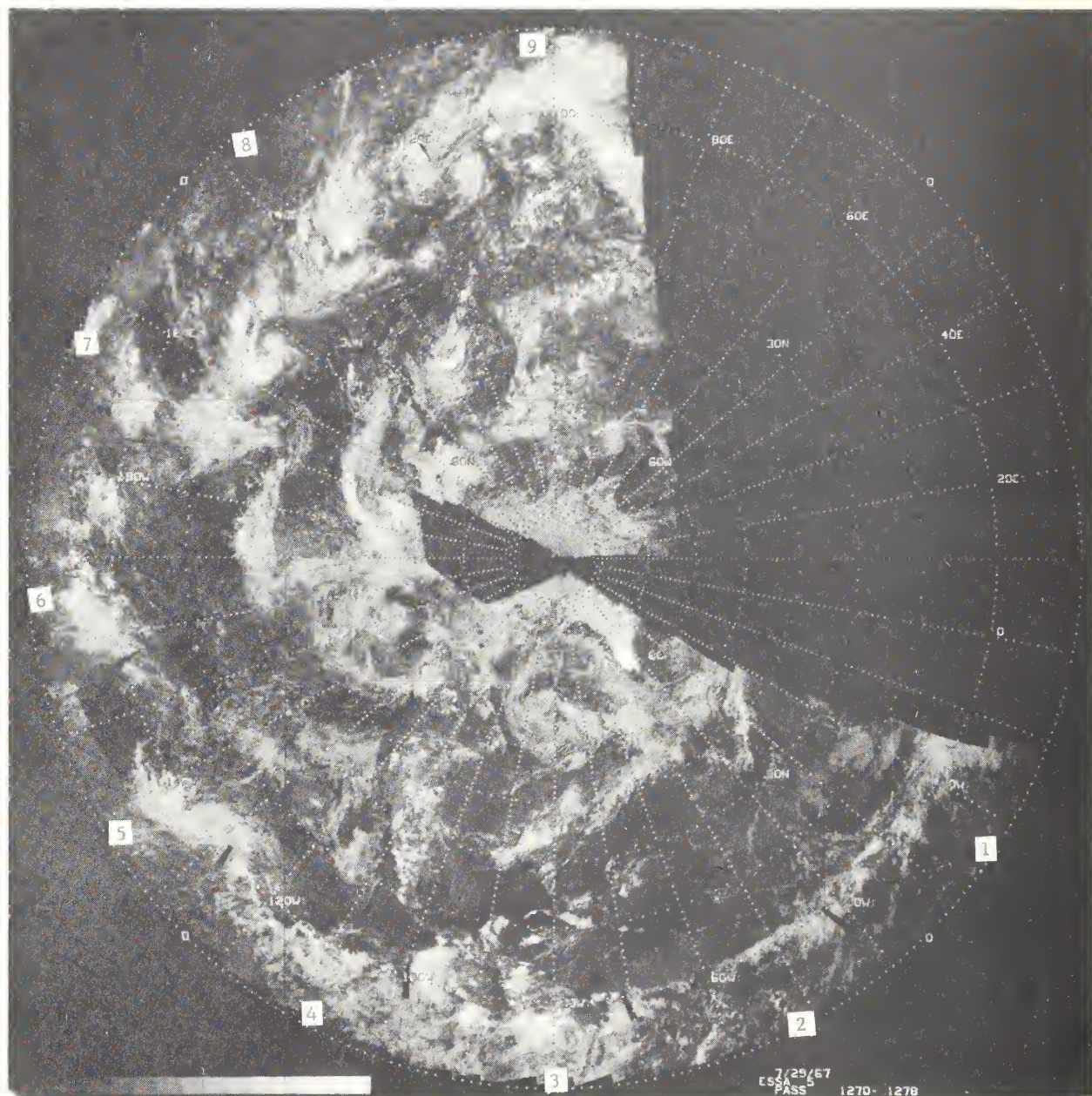
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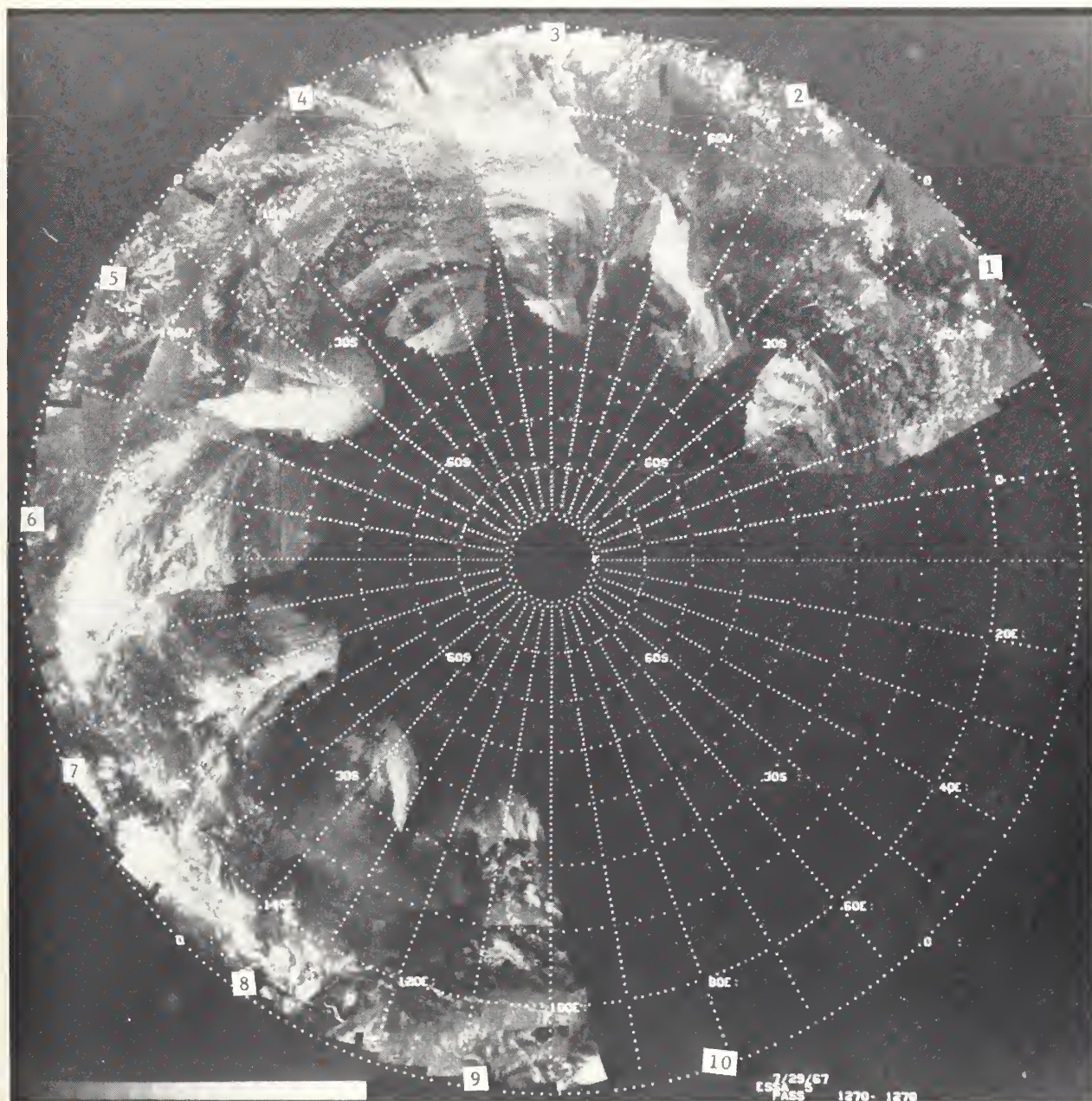
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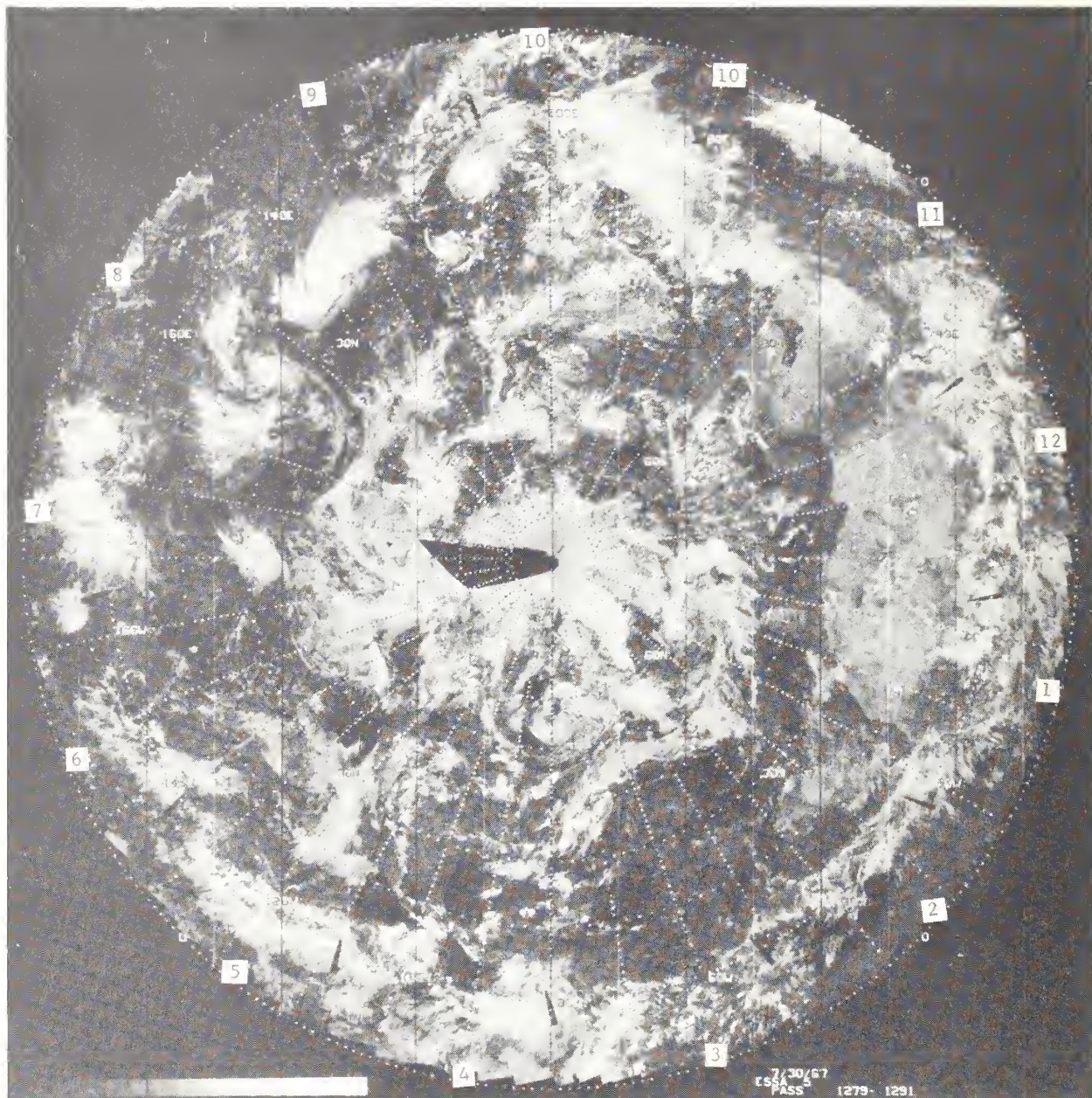
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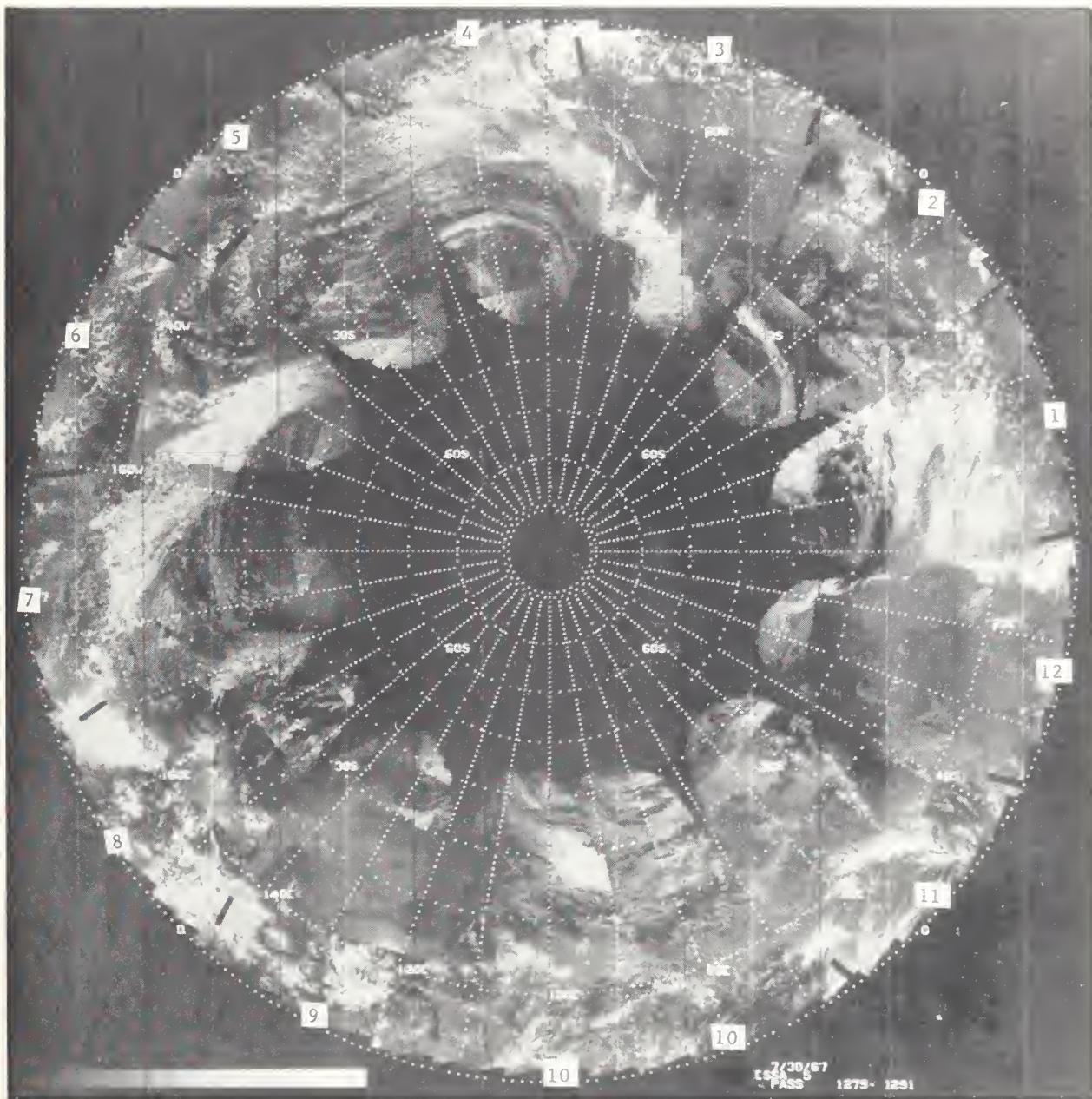
7/28/67
PASS 5
1254 1266



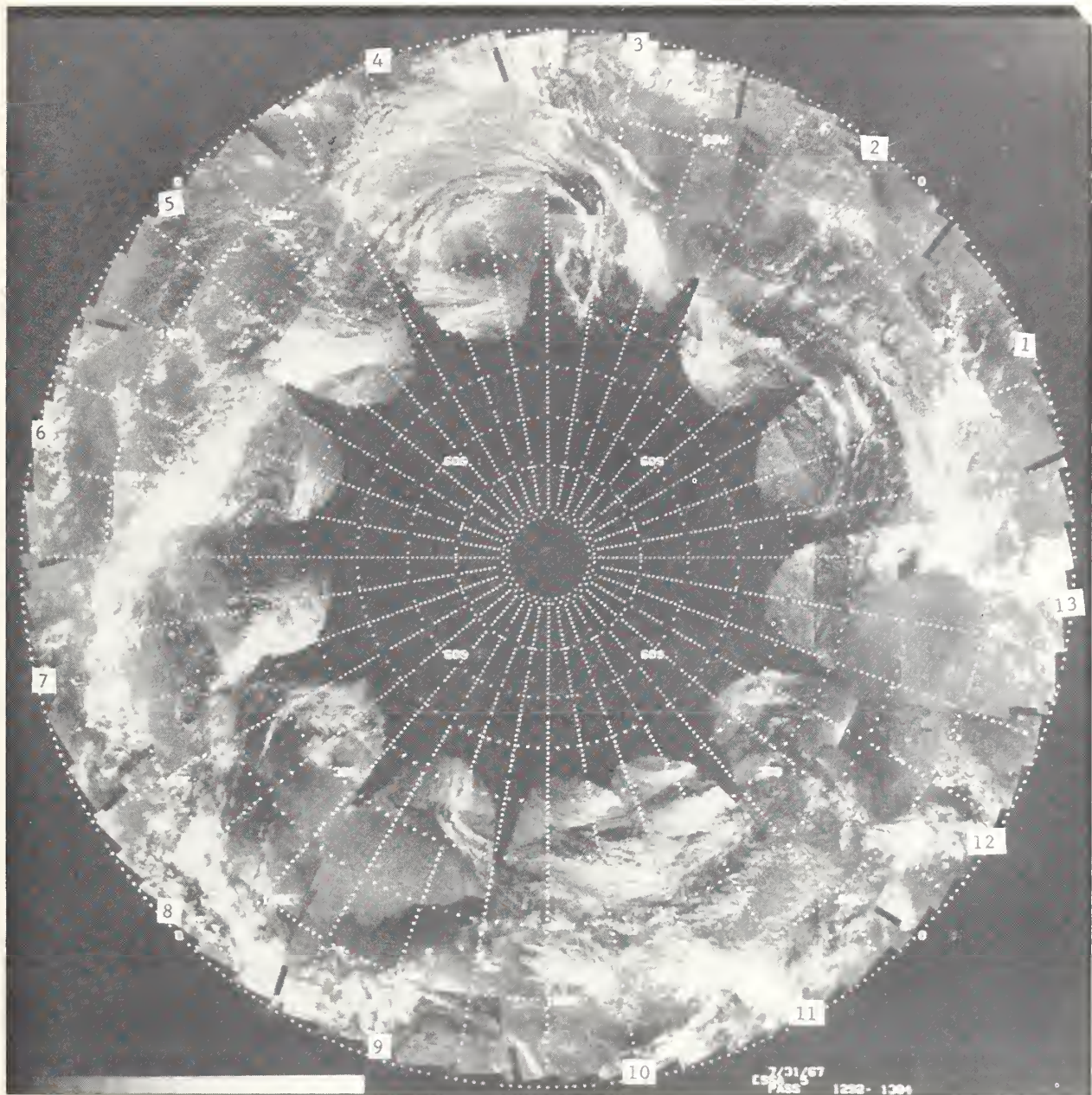


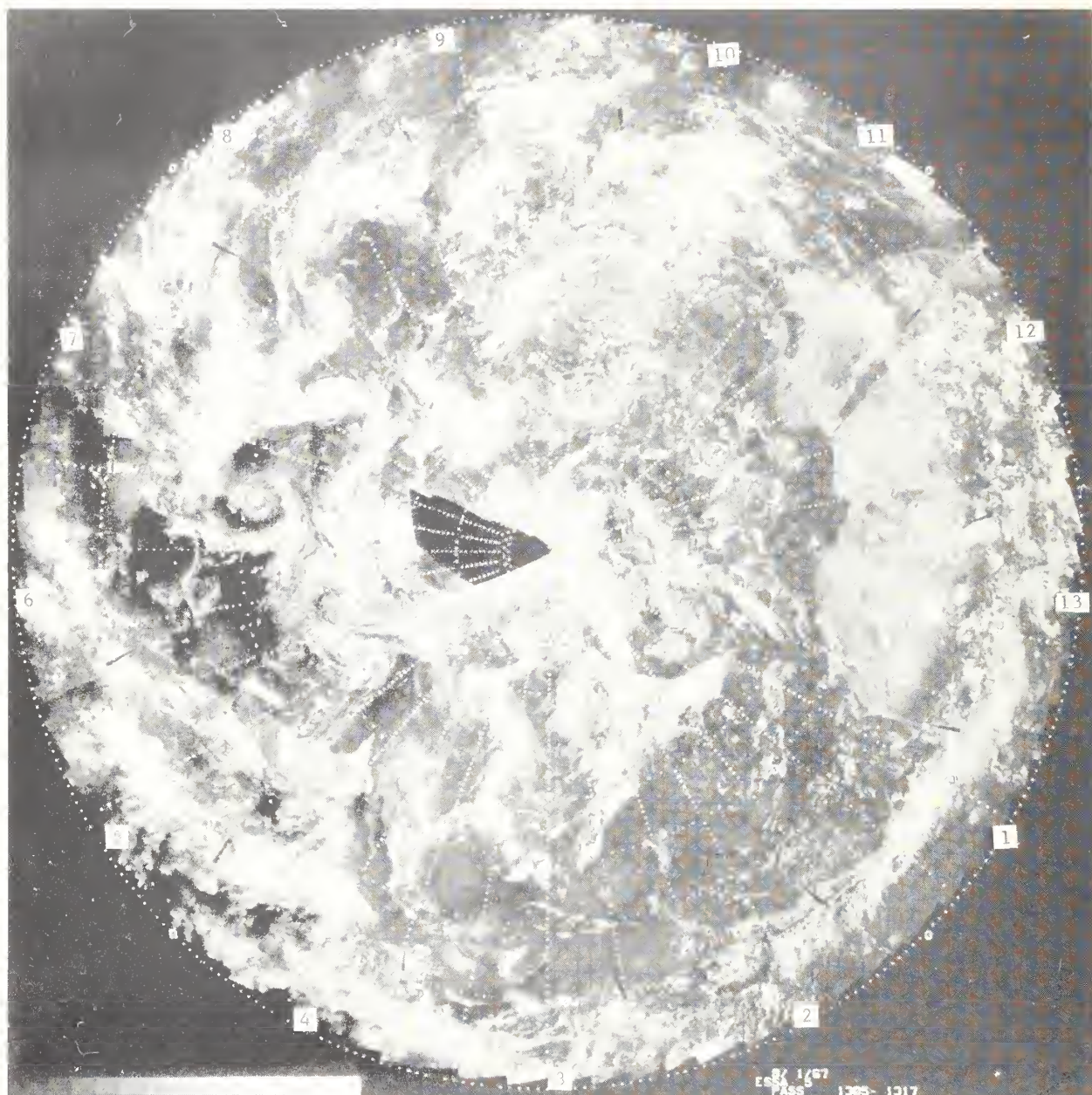






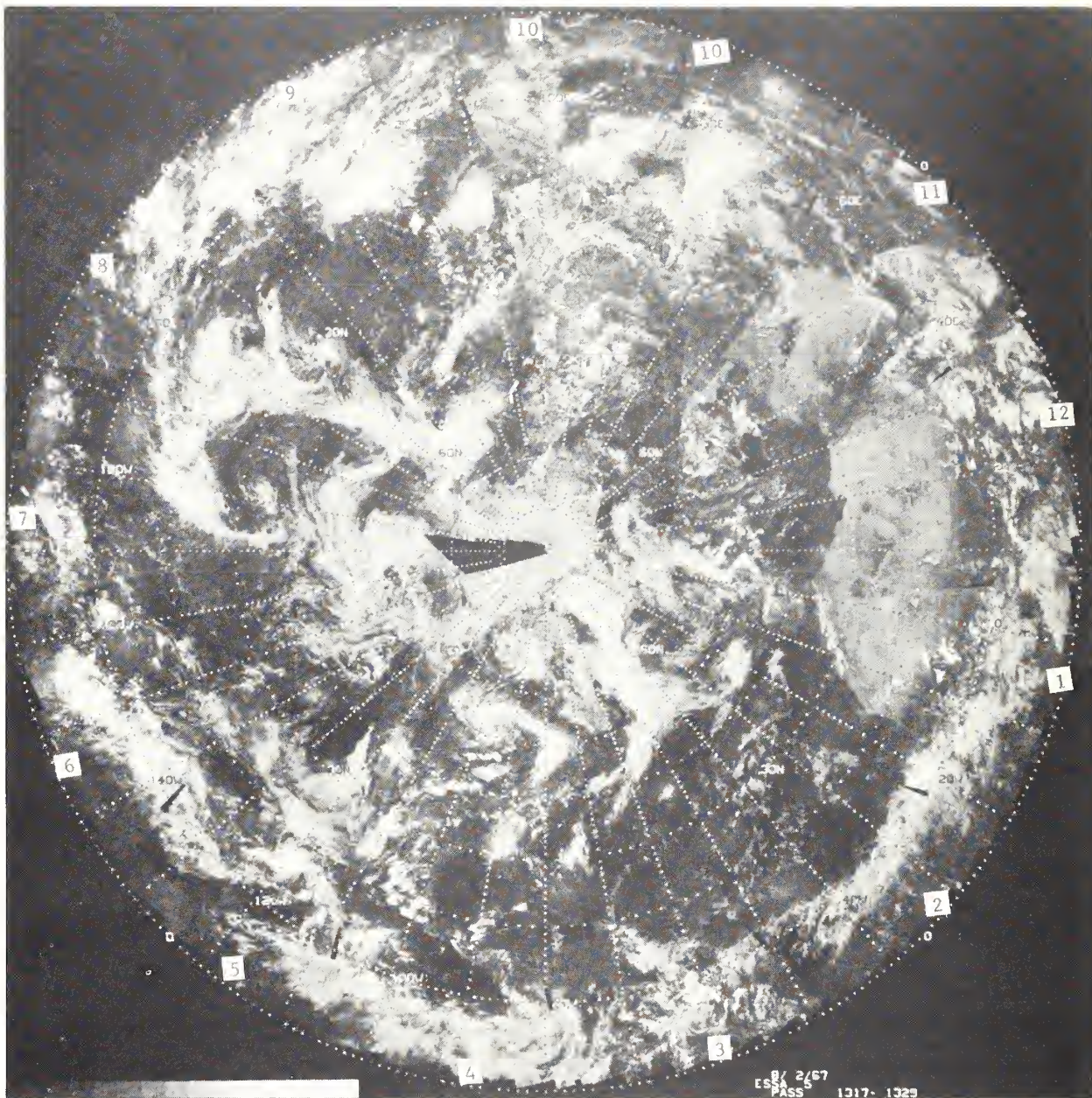


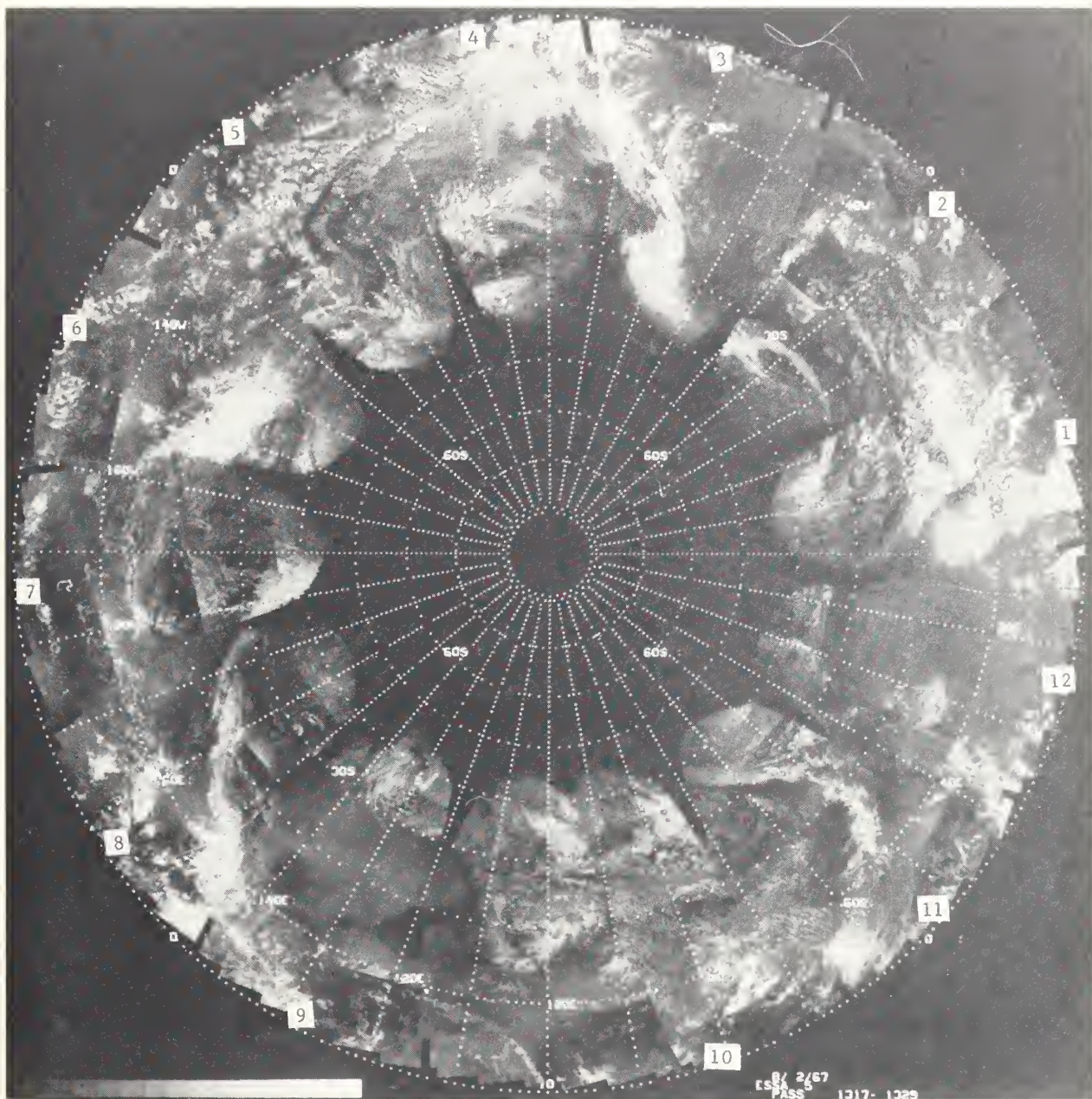




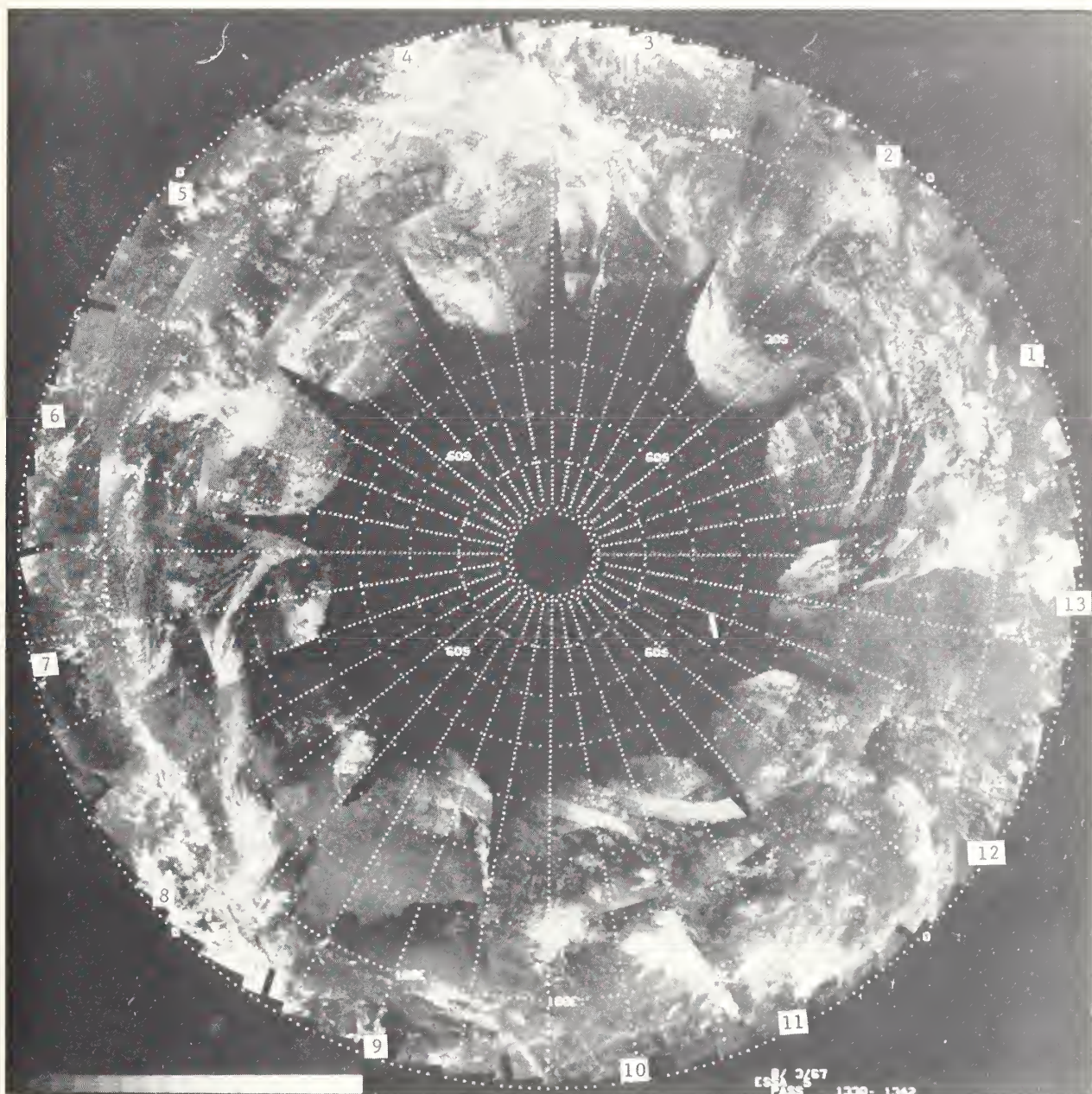
8/ 1/67
ESSA
PASS 1305- 1317

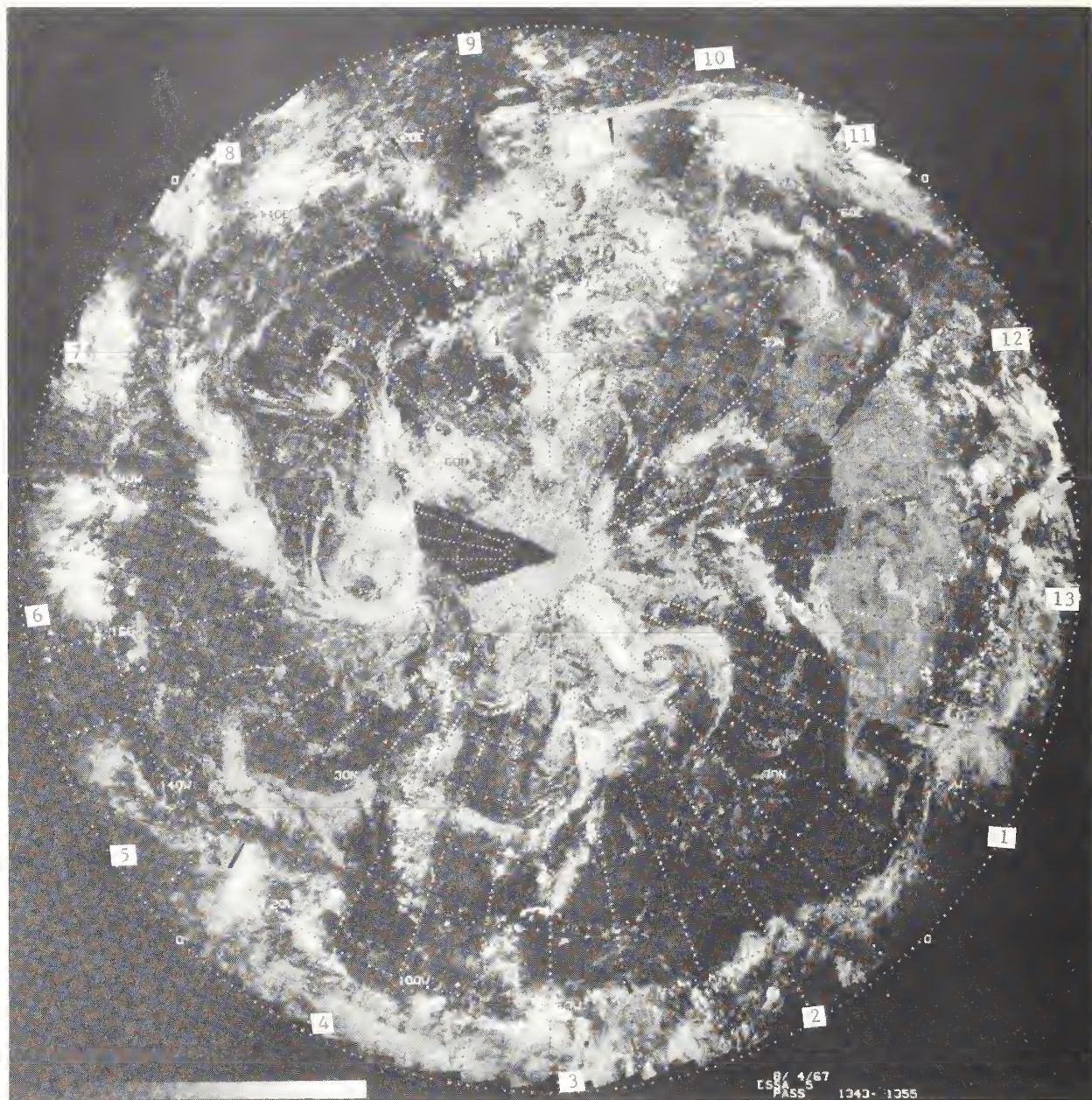




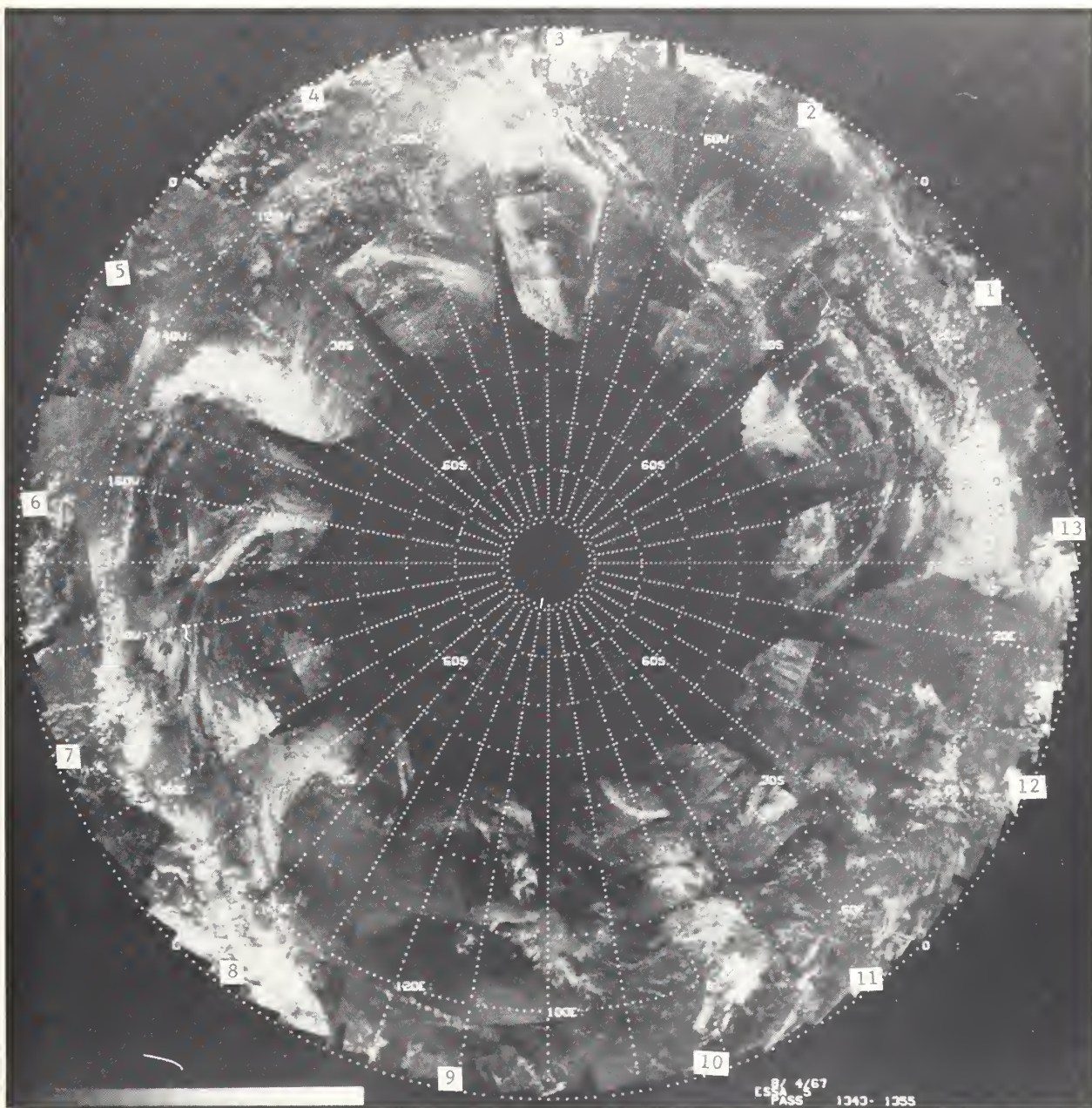


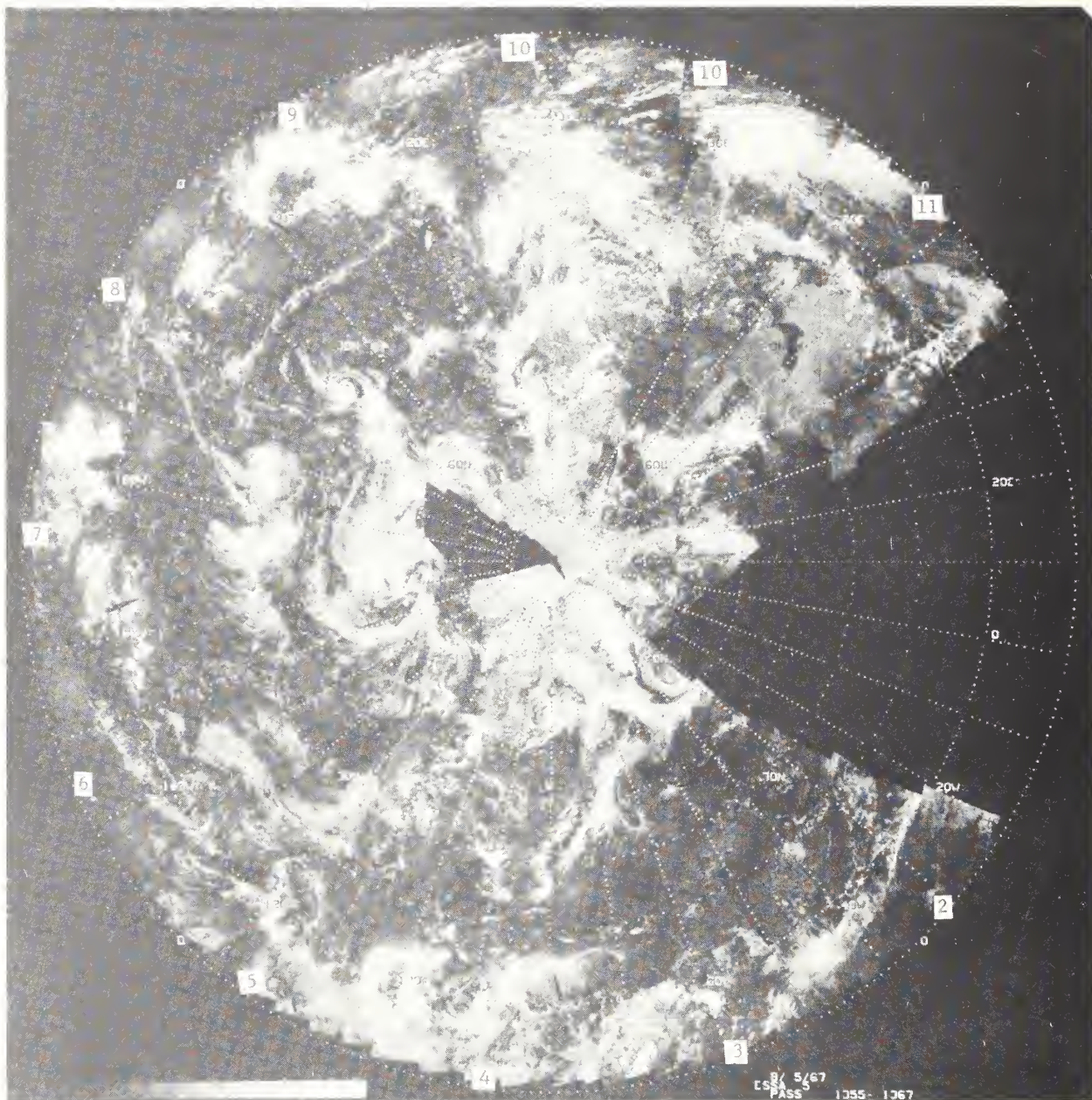


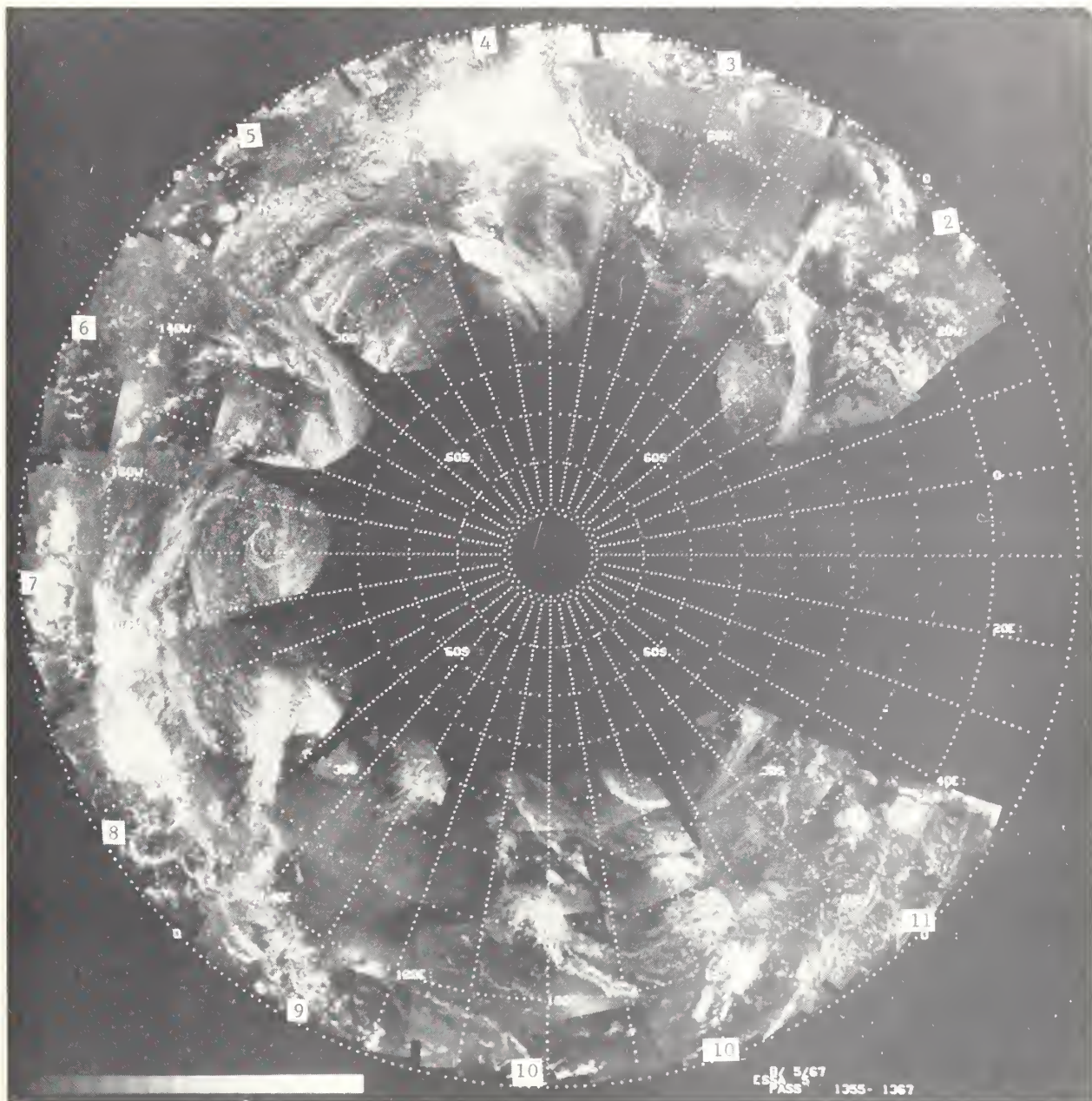


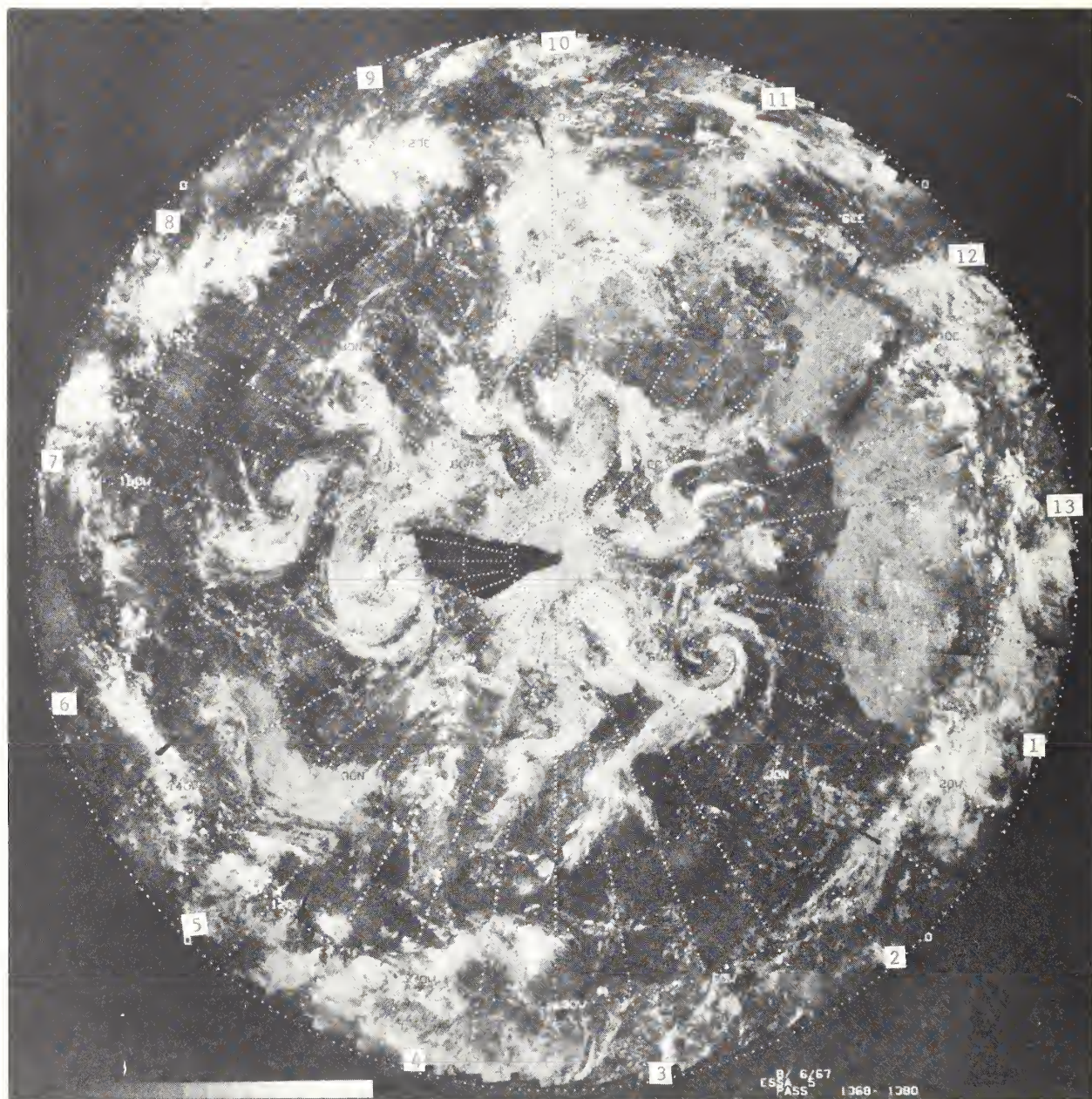


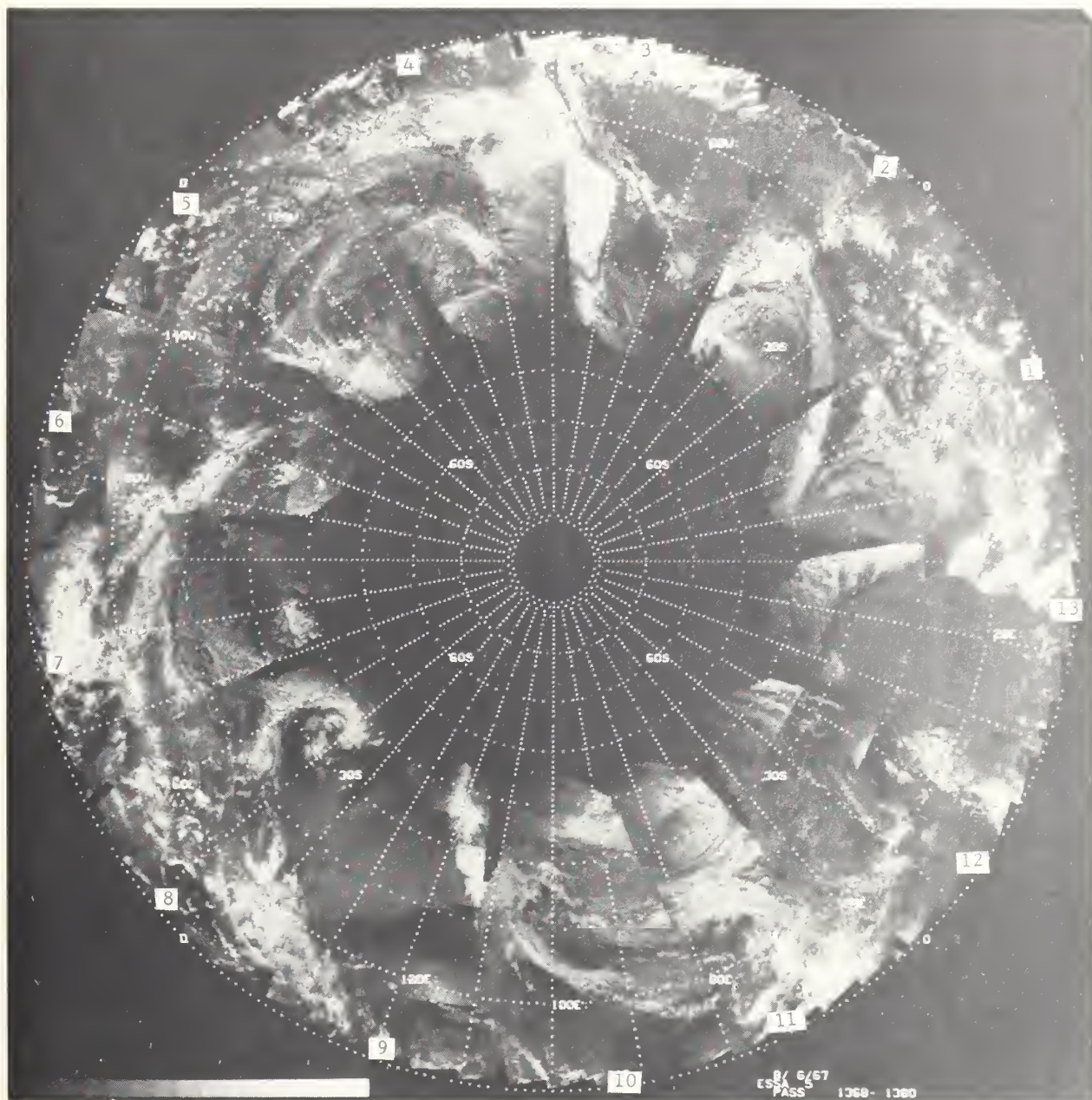
8/4/67
PASS 5
1343-1355

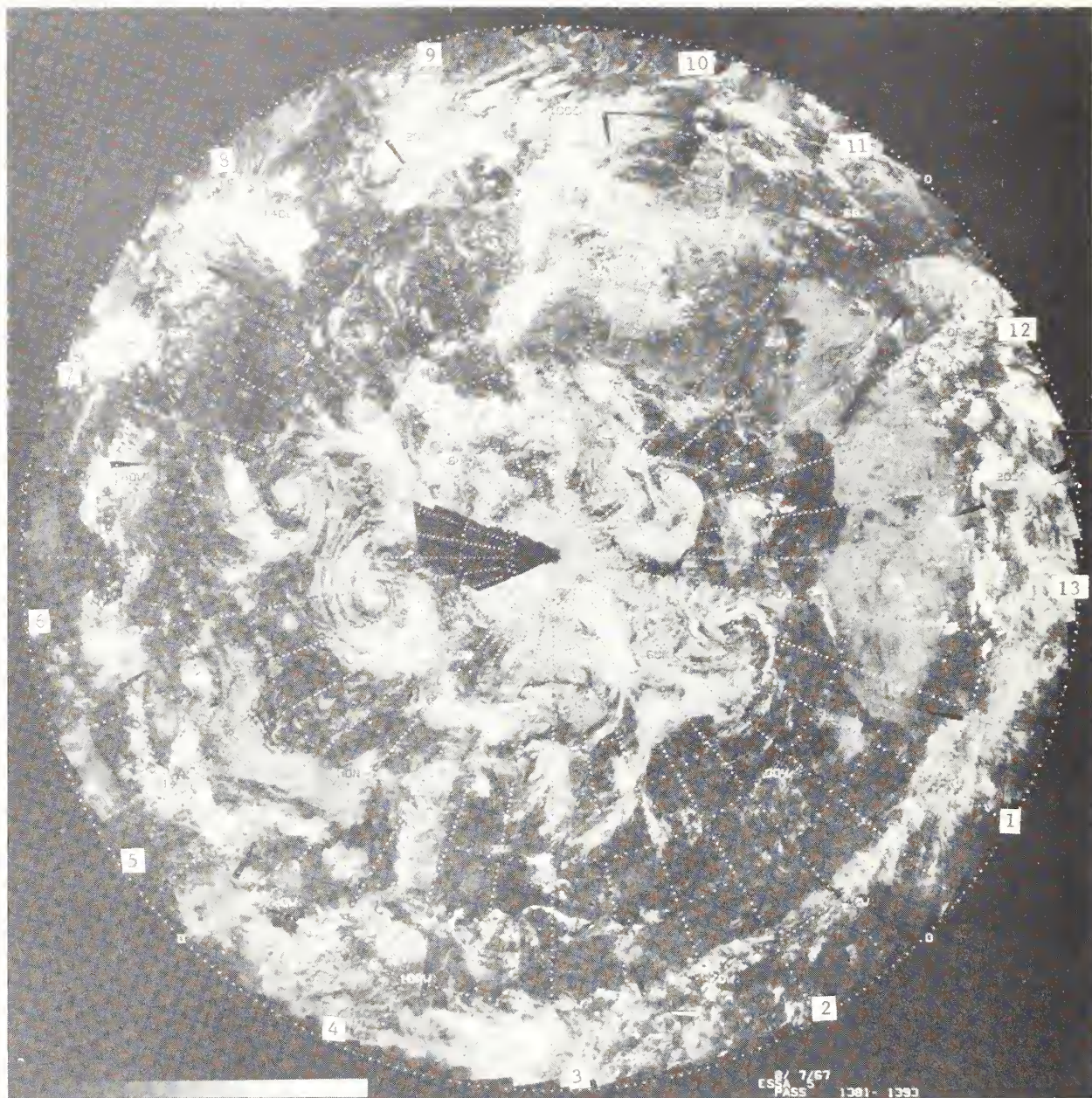


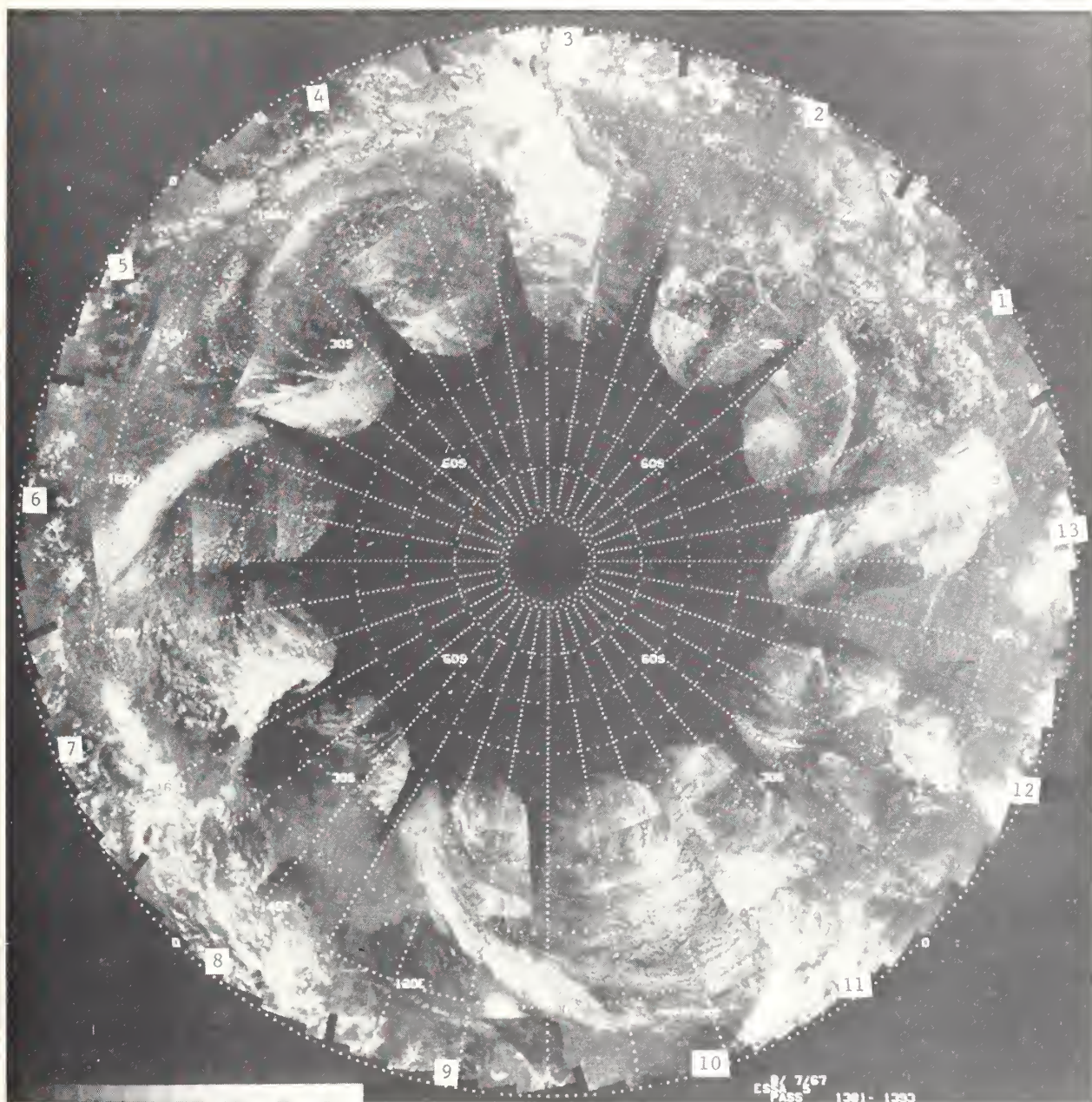


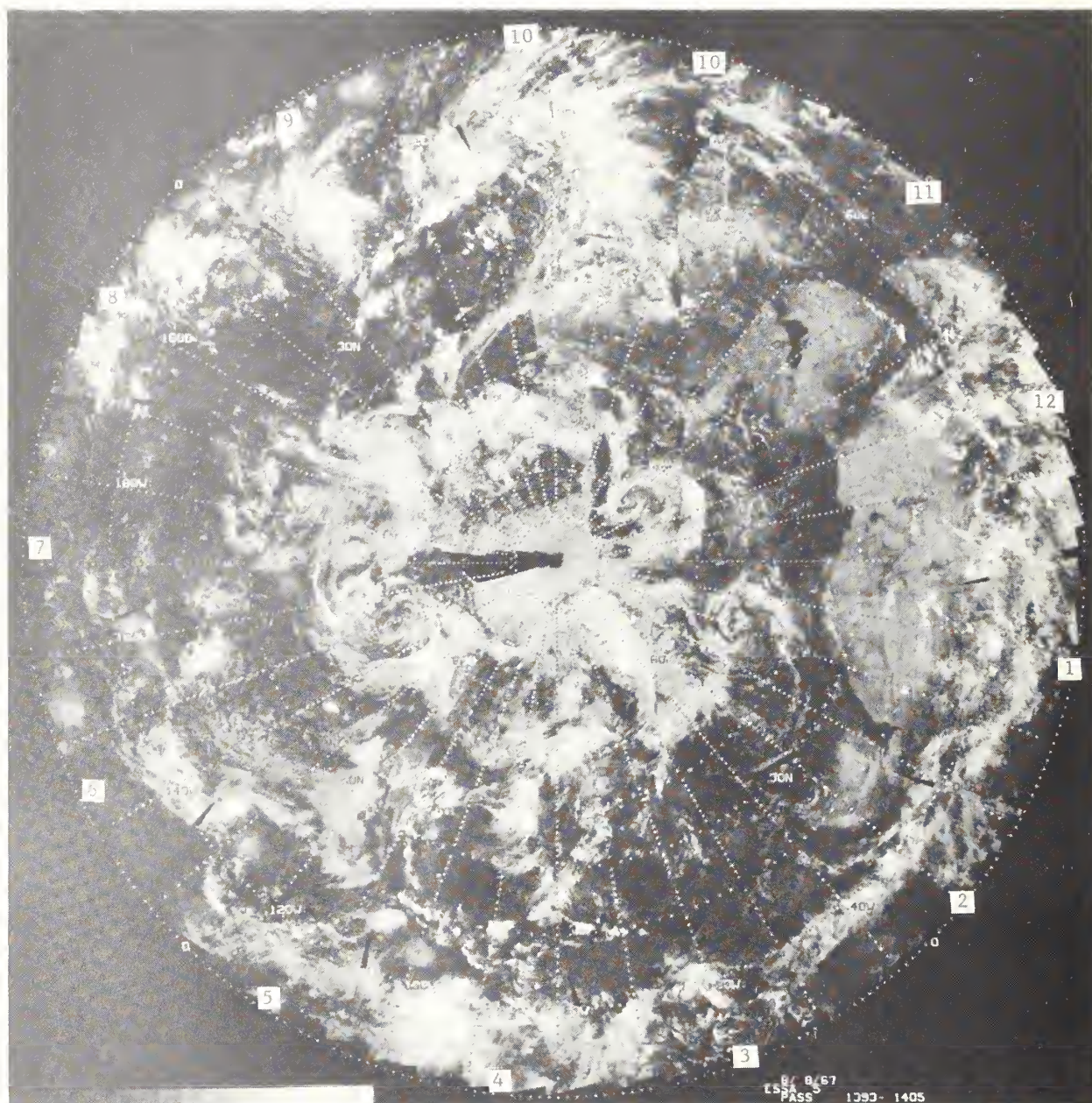


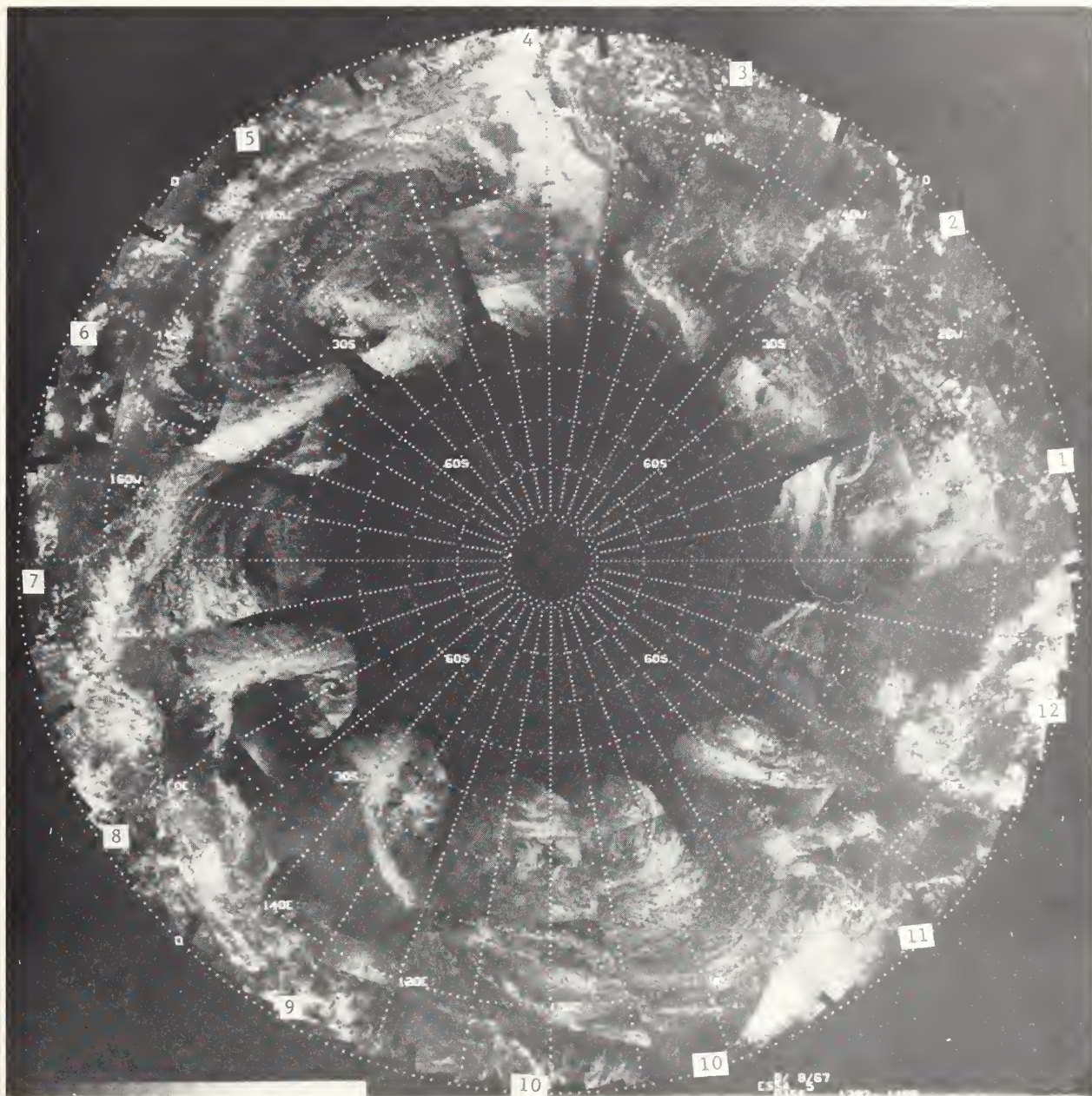




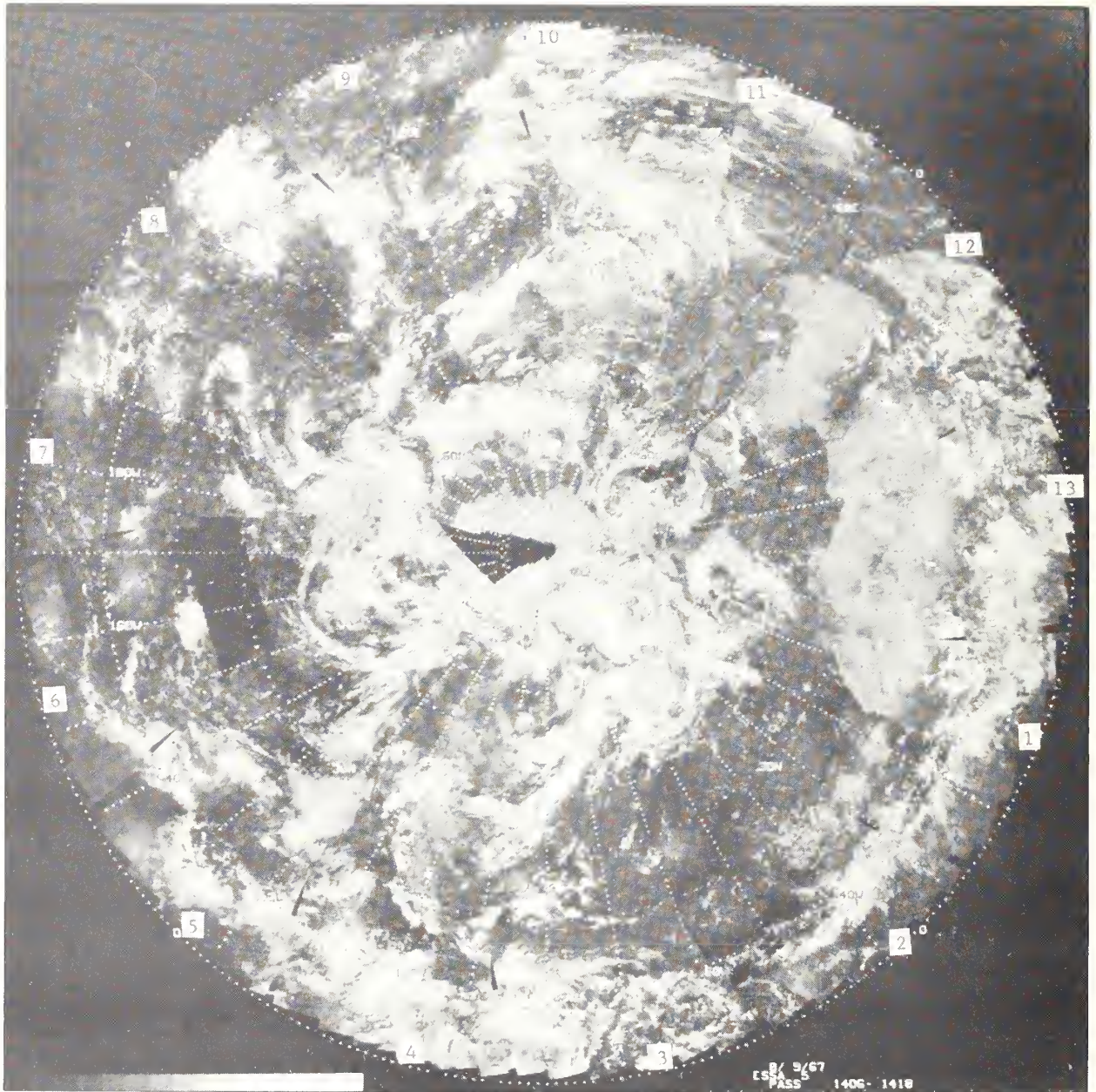


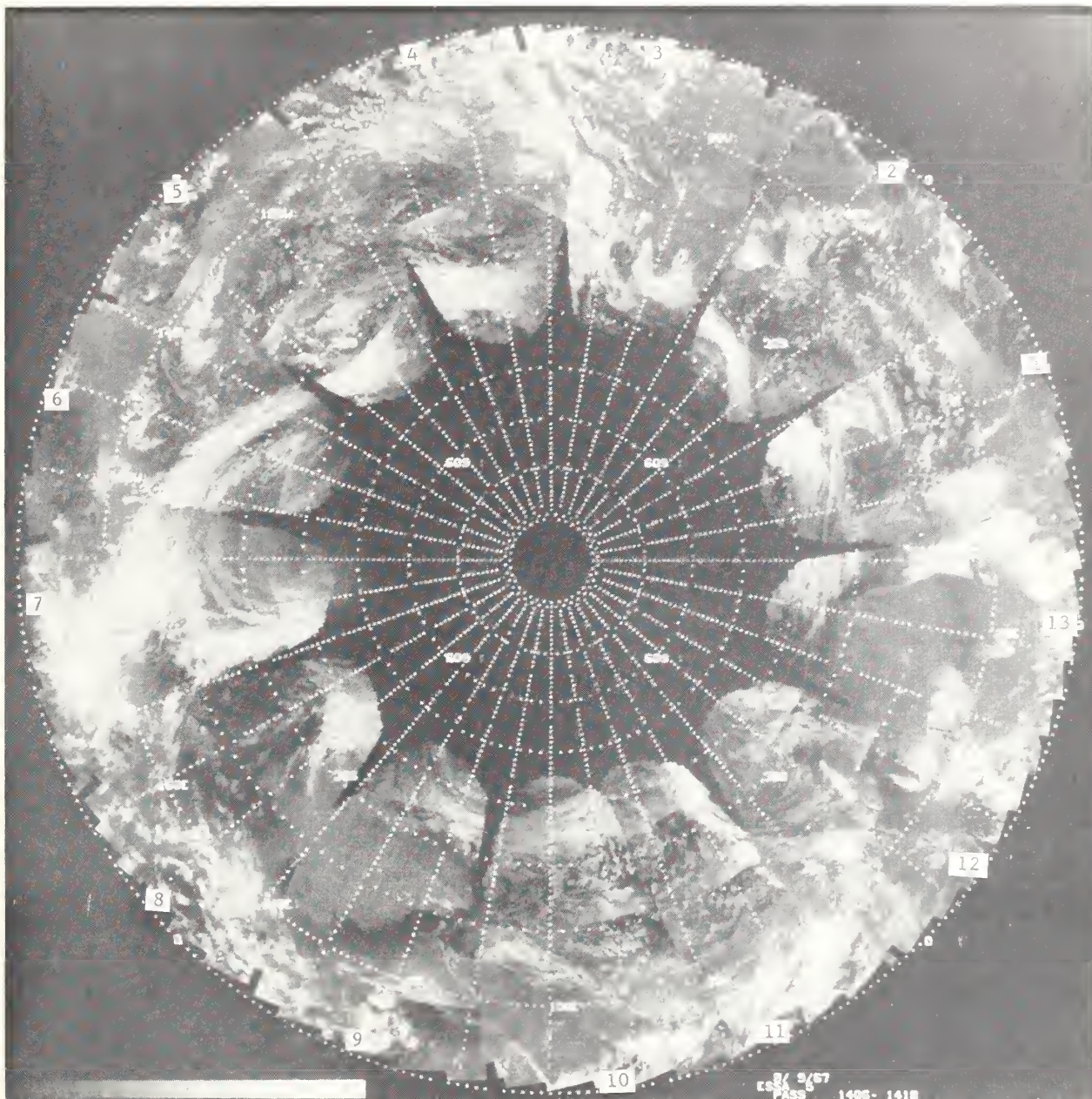




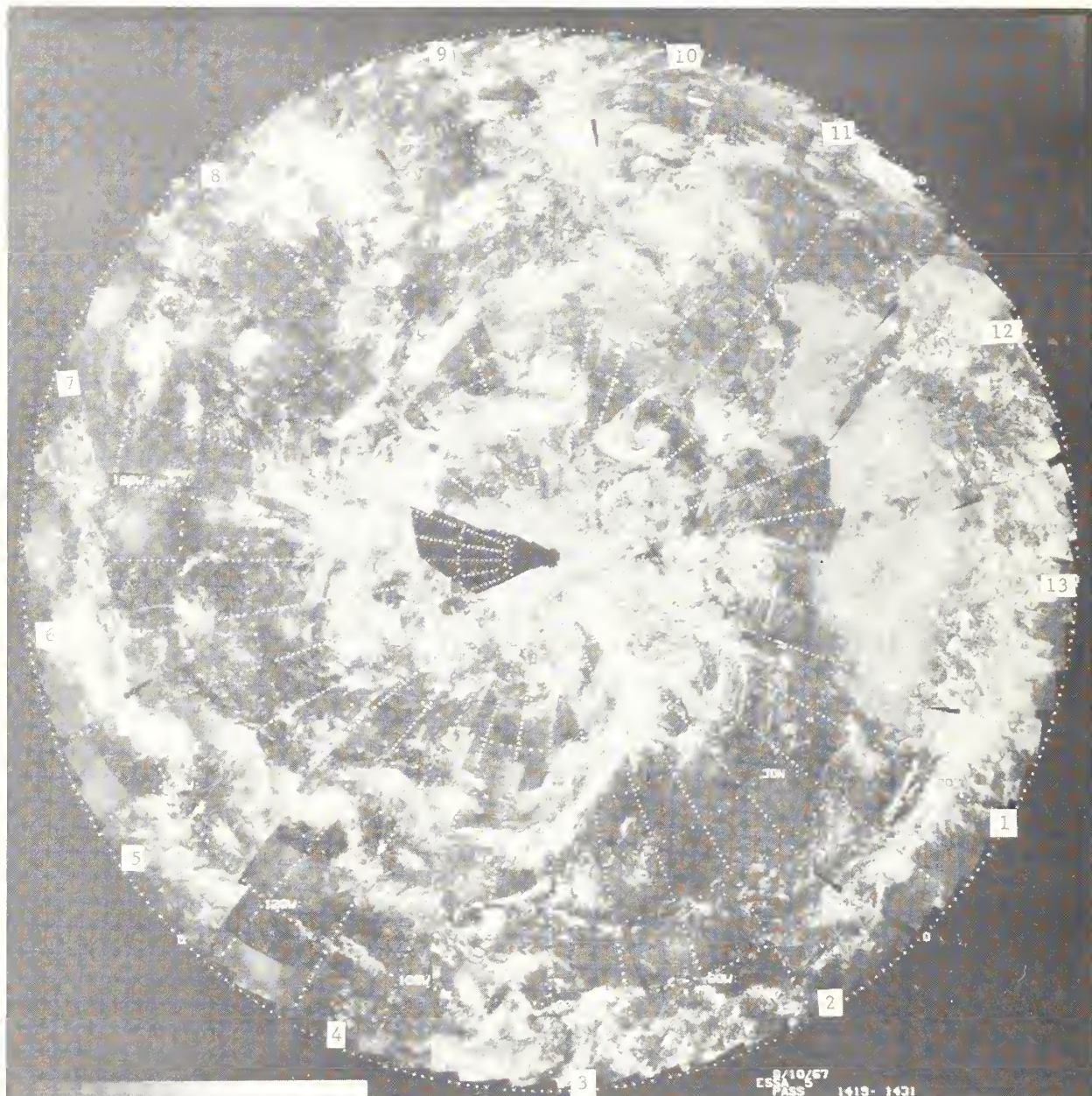


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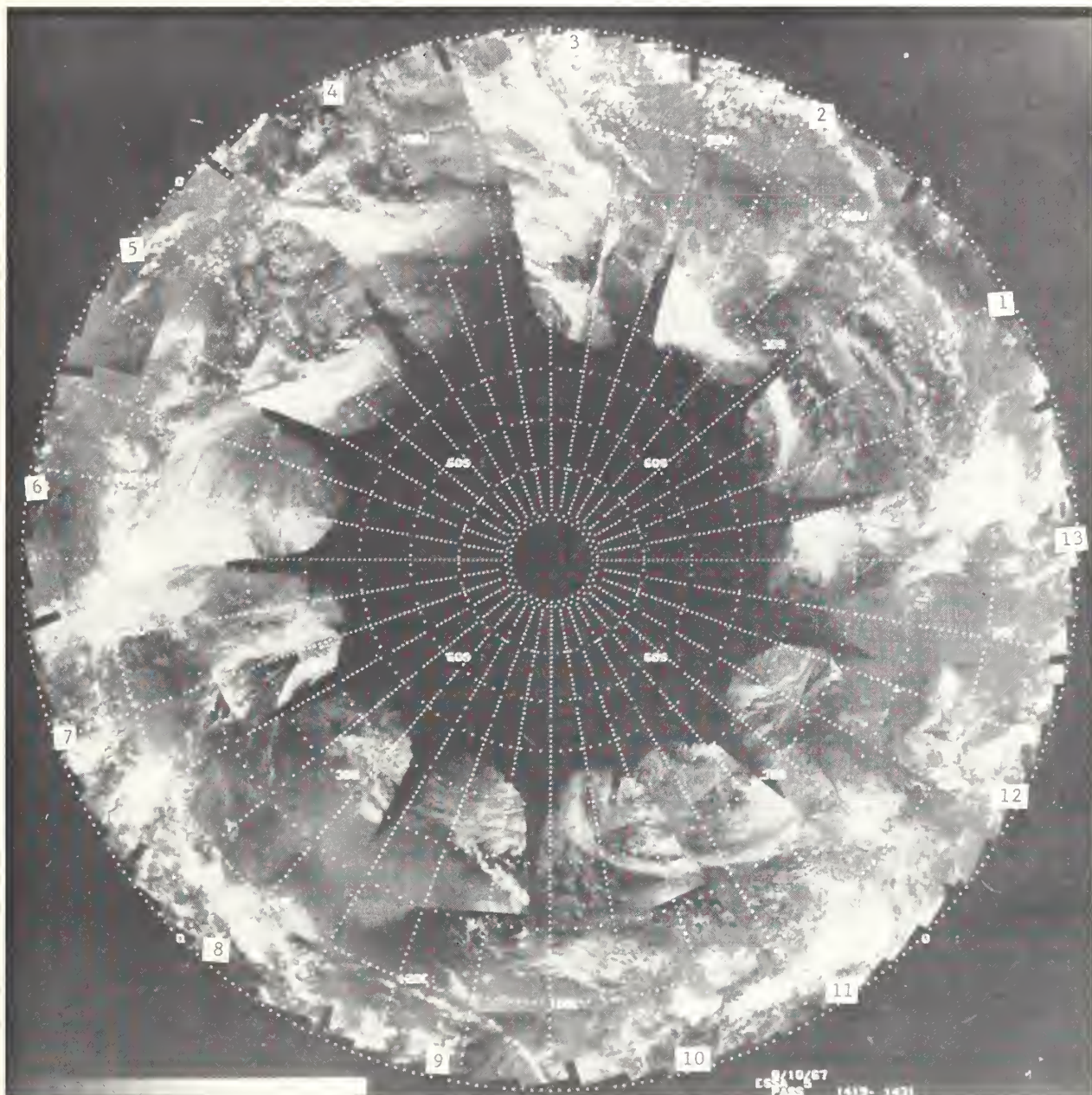


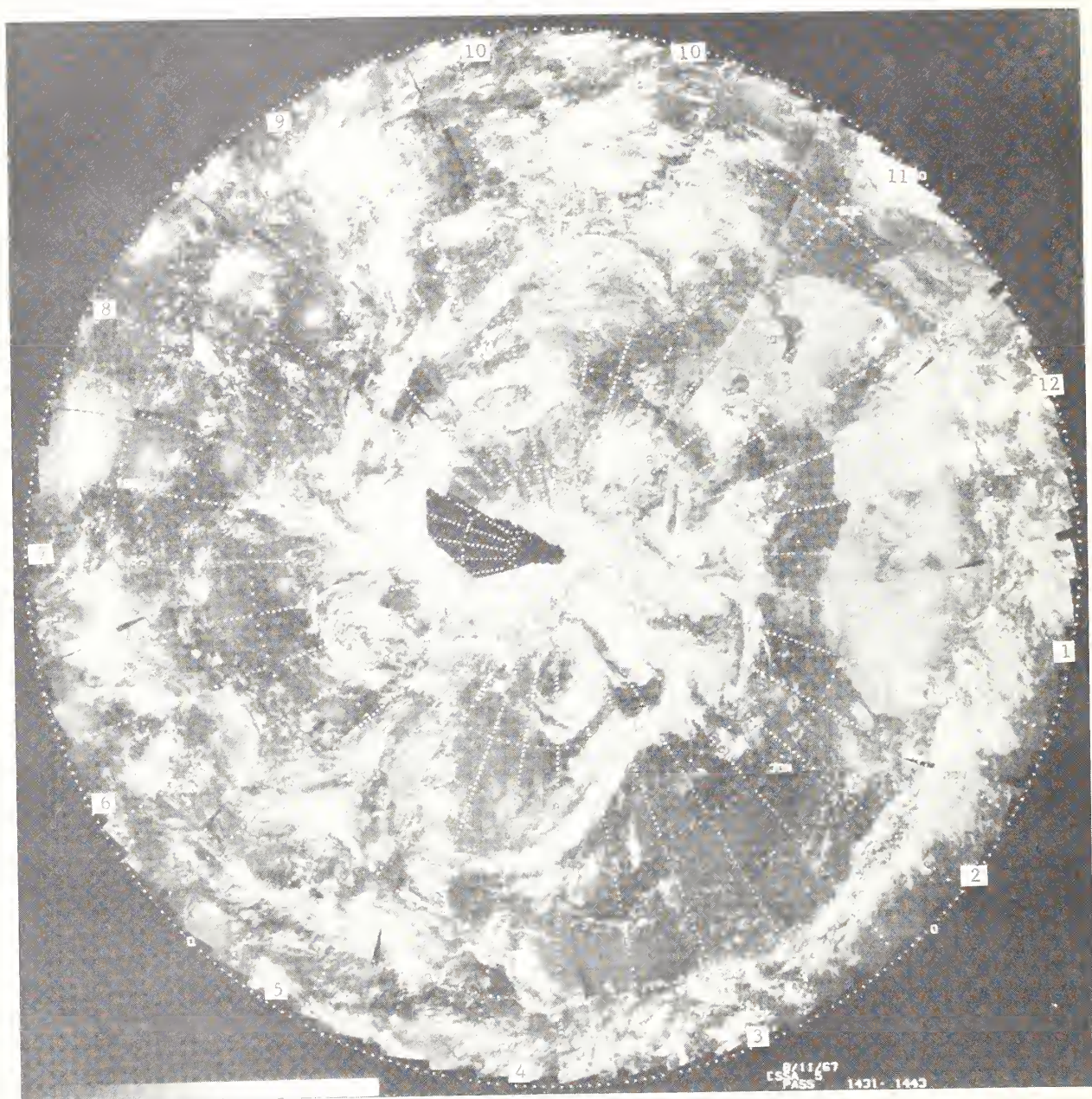


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PASS 1405- 1418

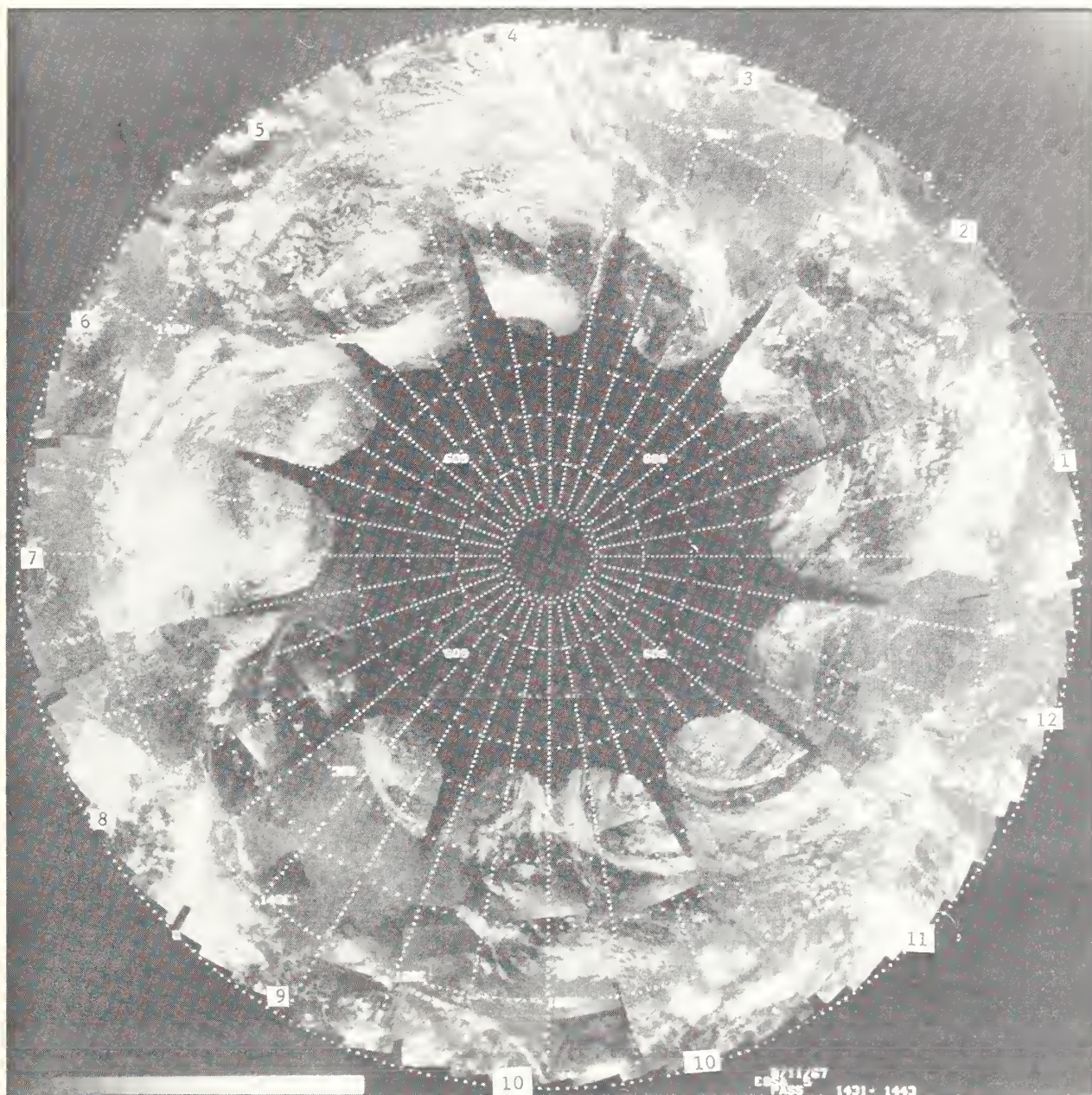


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ESR 5
PASS 1419-1421

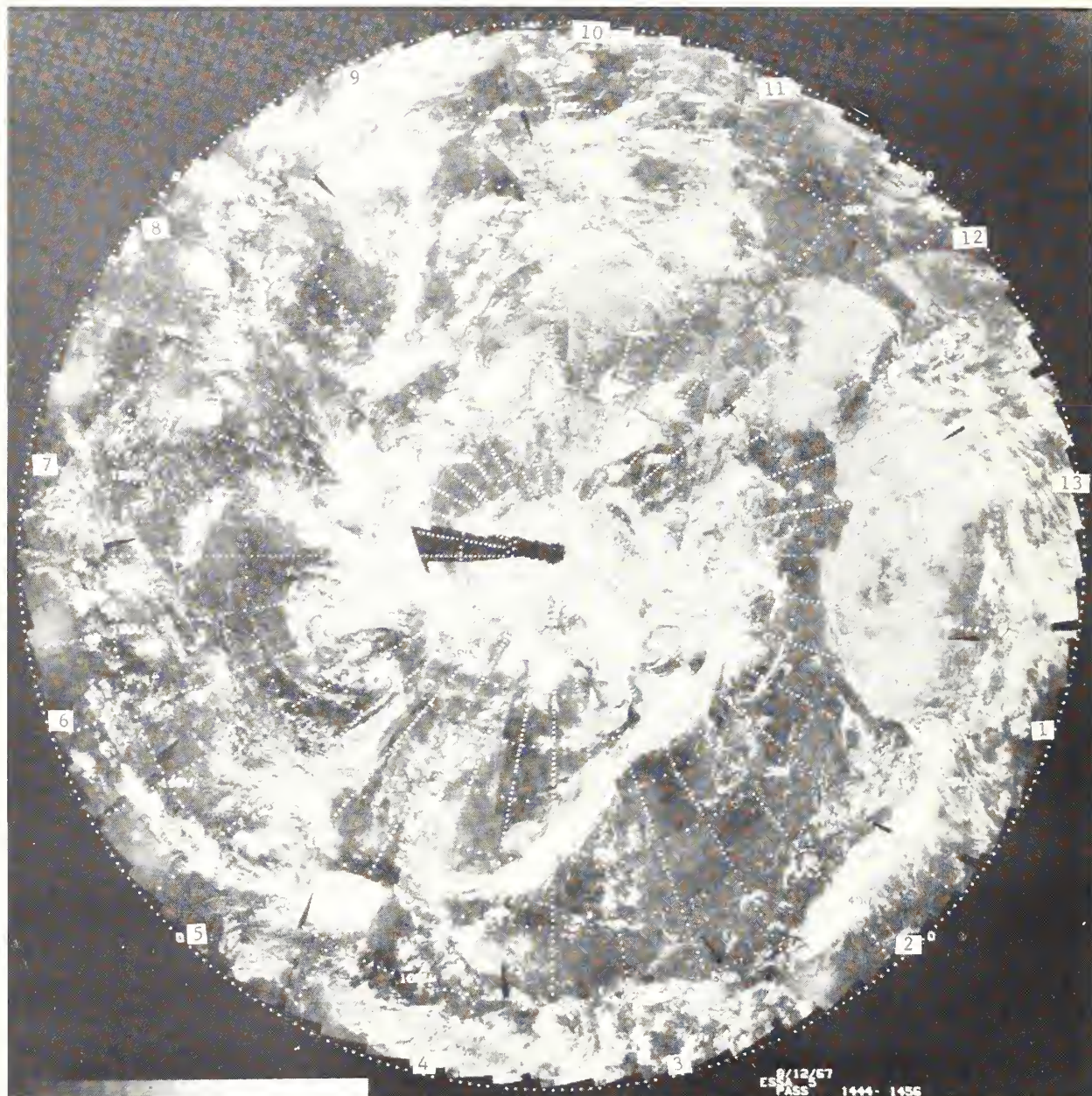




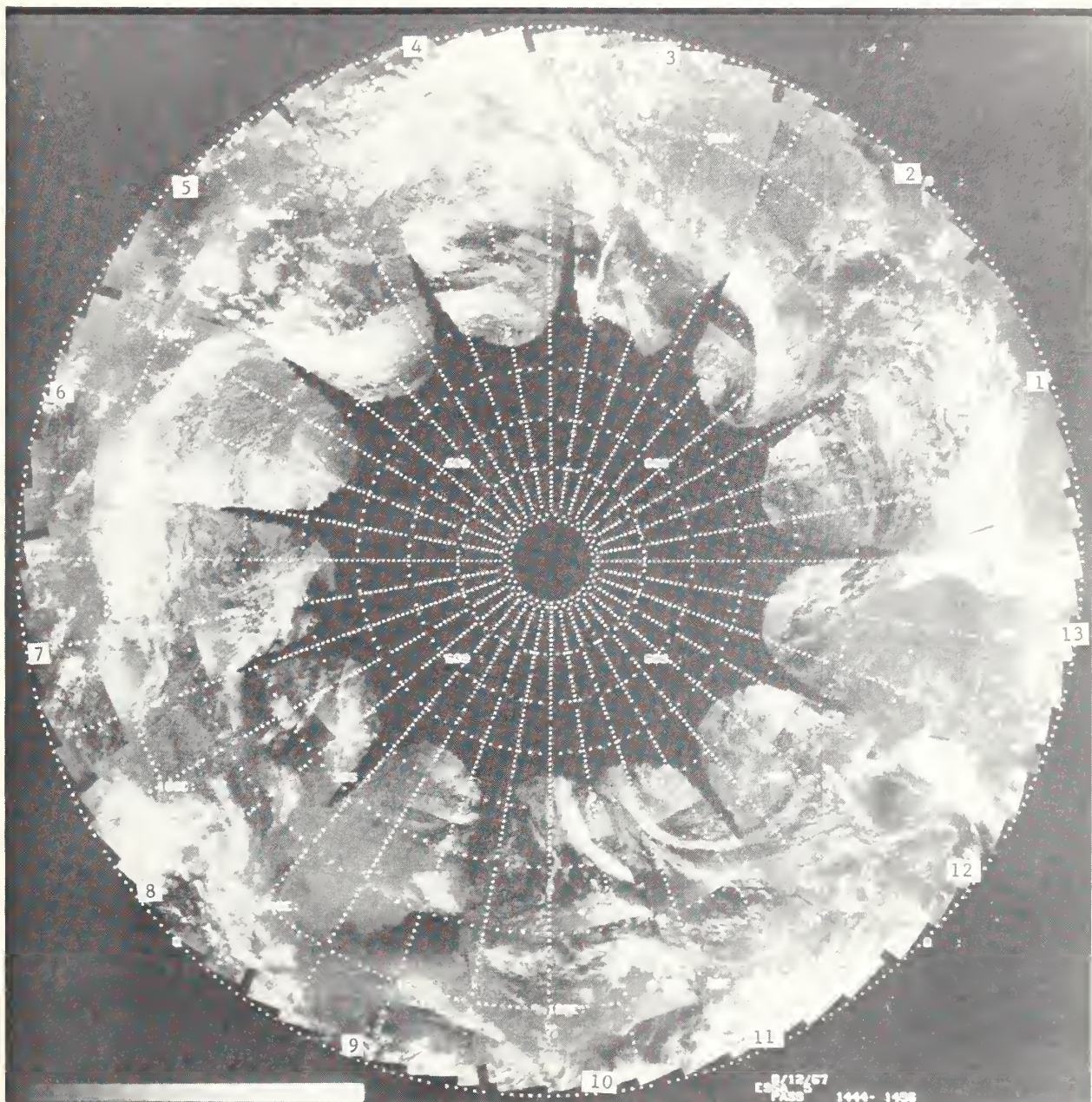
8/11/67
ESSA 5
PASS 1431-1443

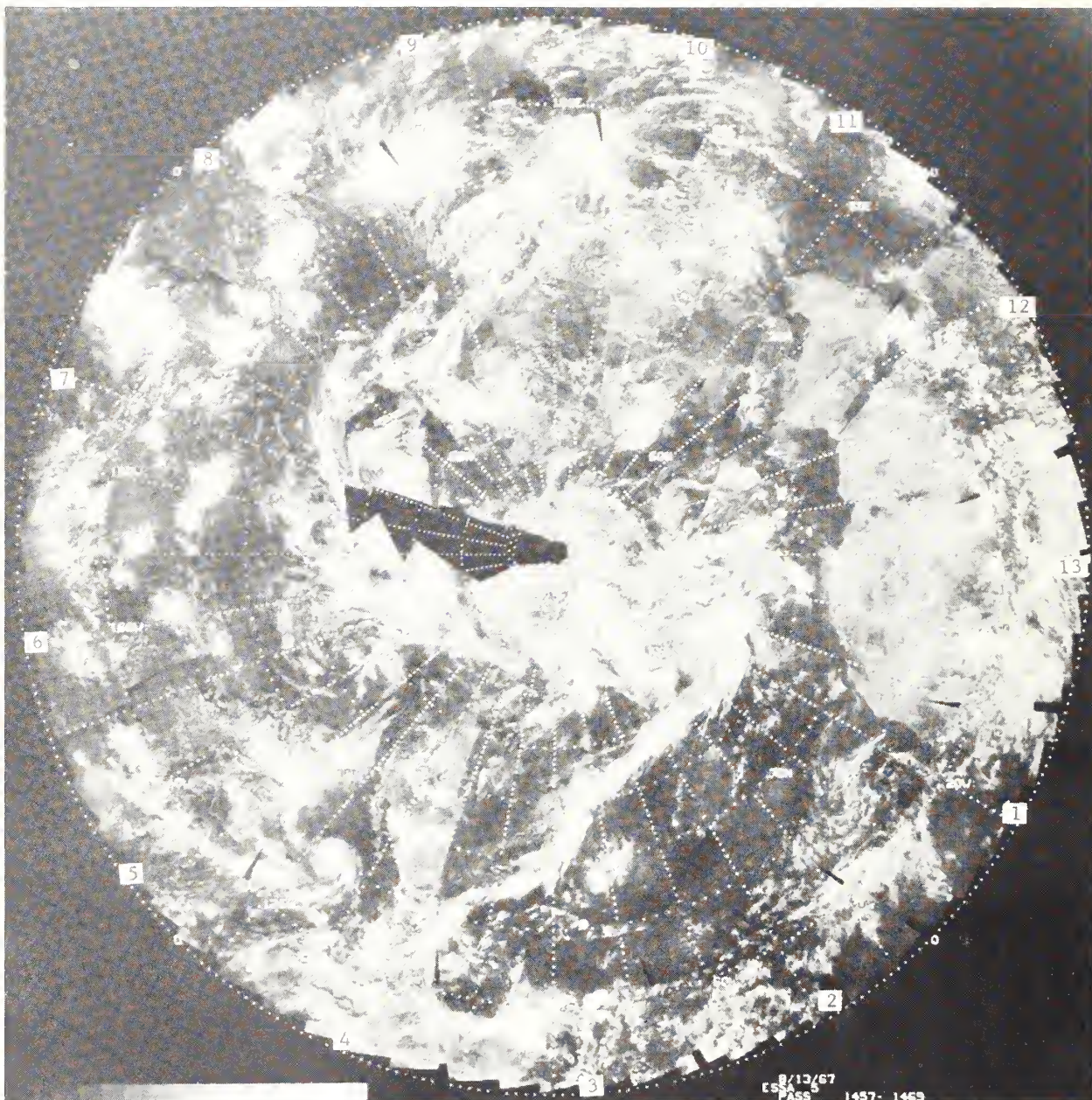


1431-1443

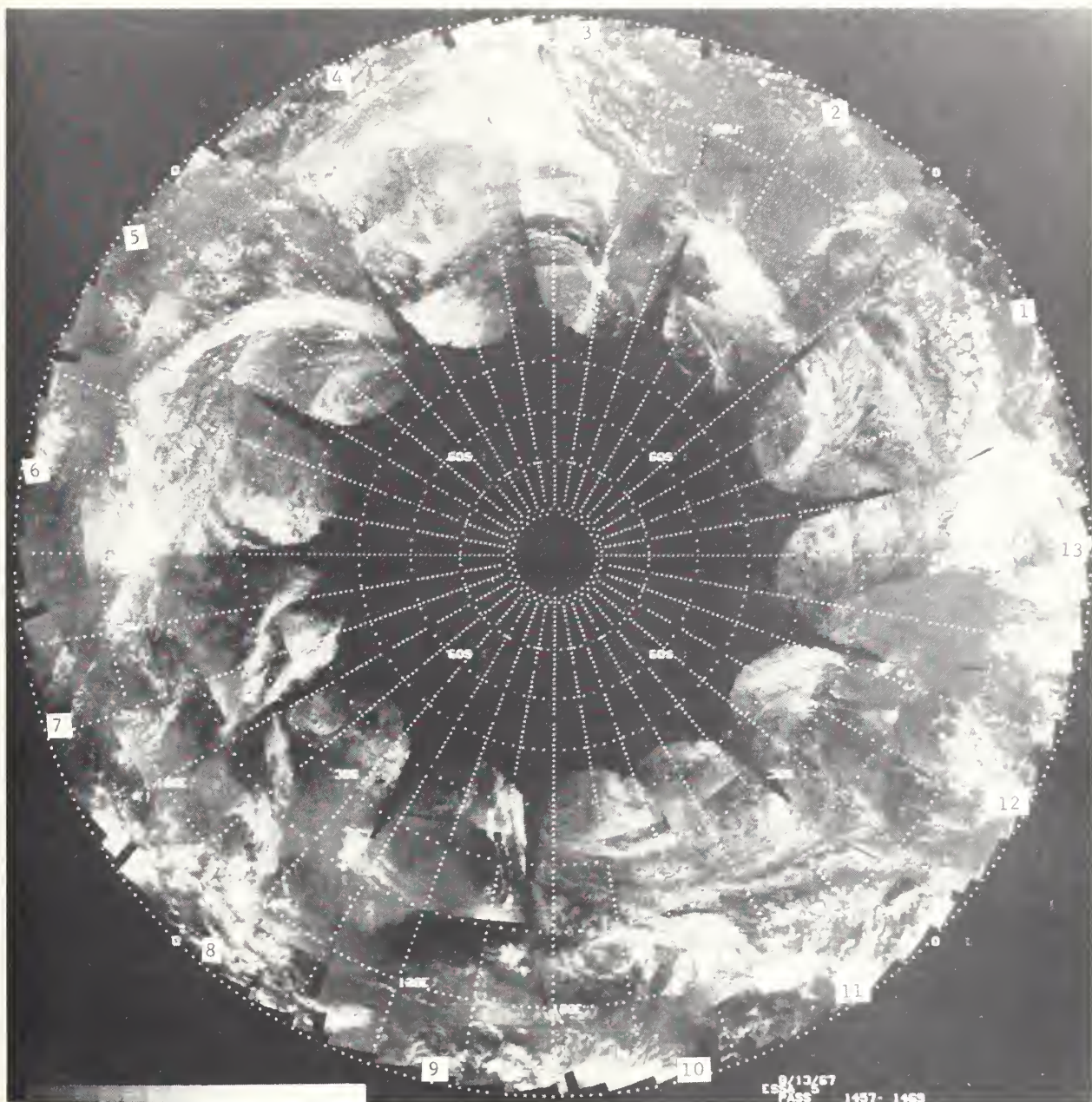


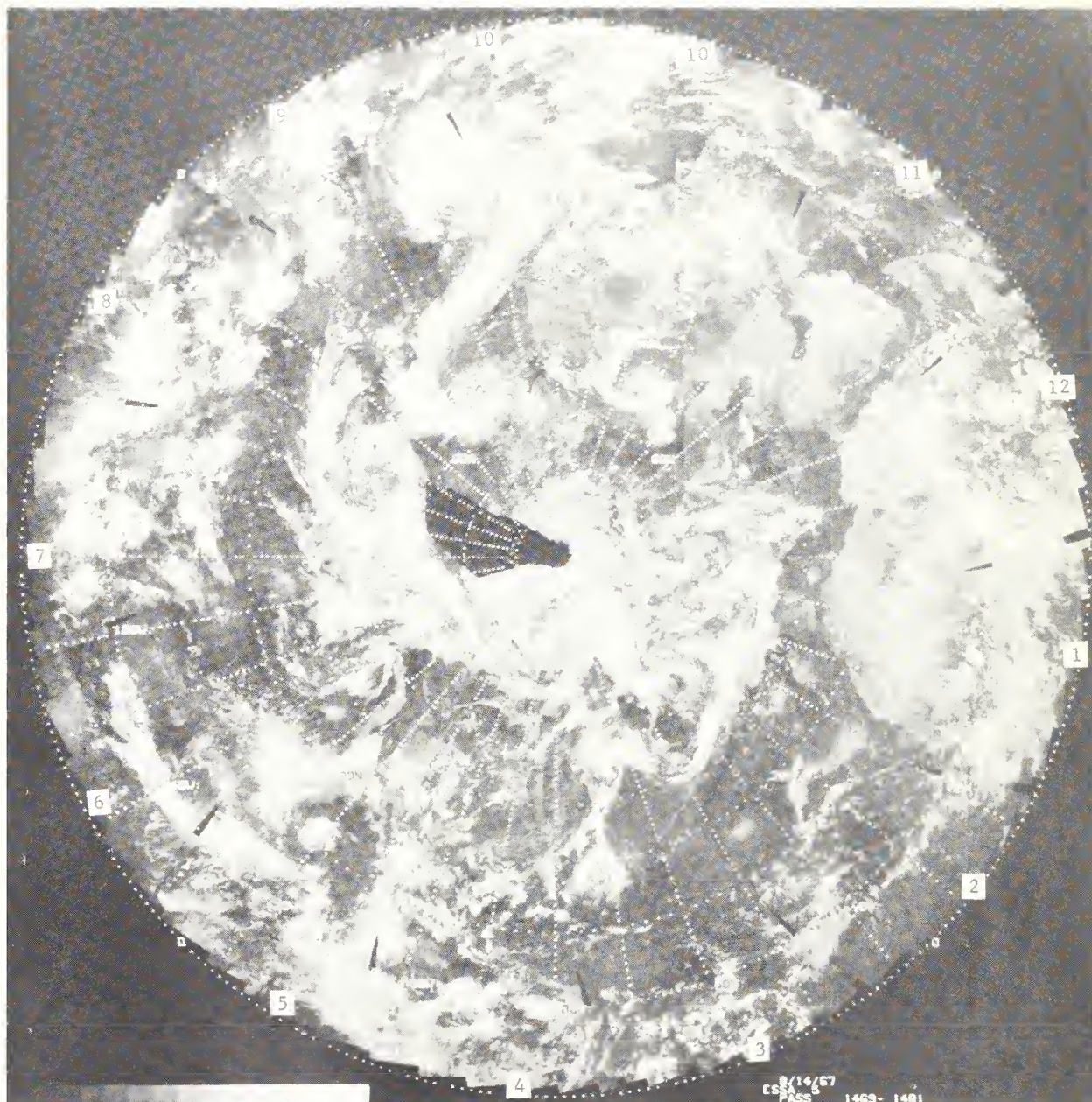
8/12/67
ESS PASS 1444-1456





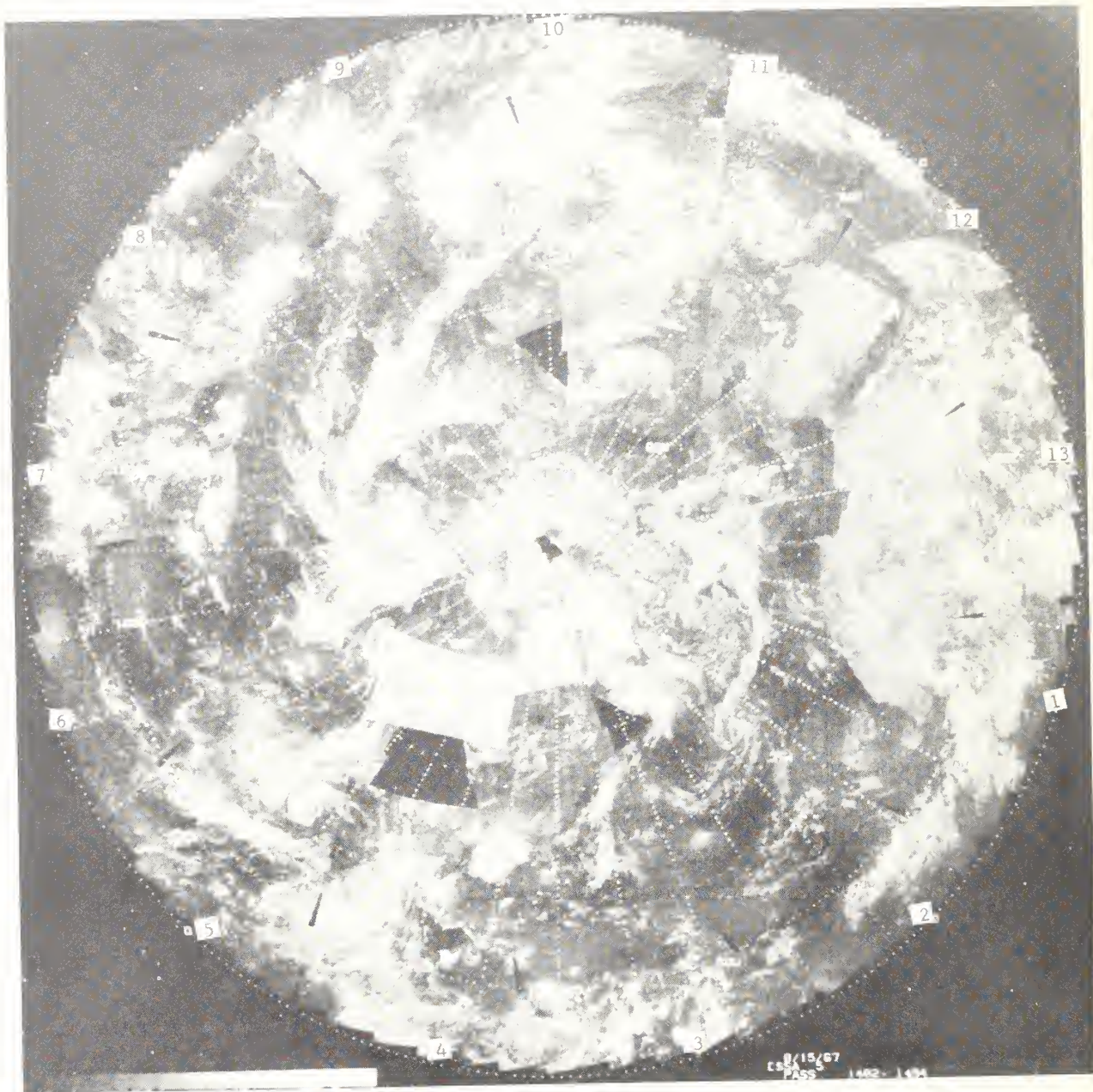
8/13/67
ESS 5
PASS 1457- 1469

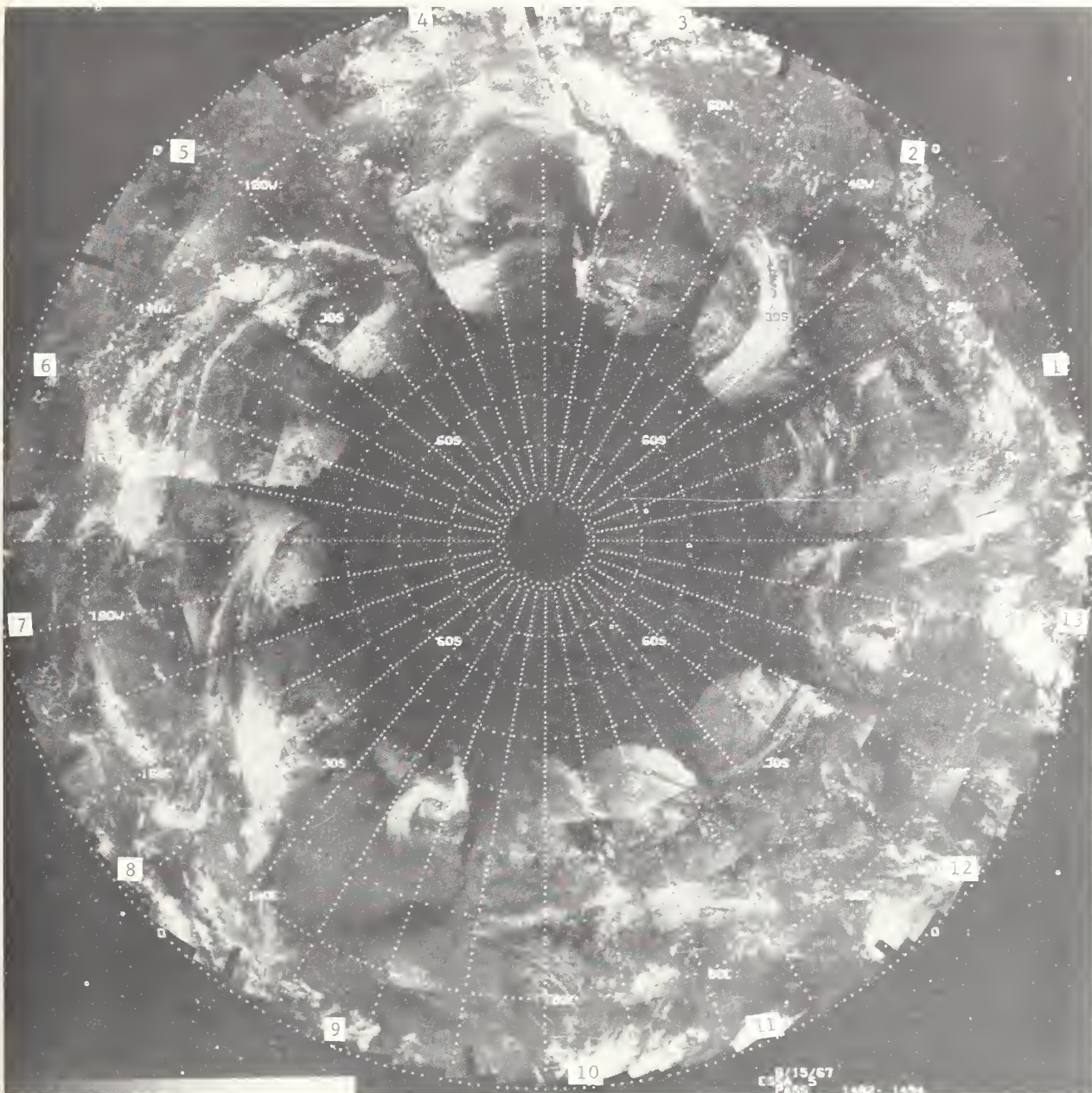


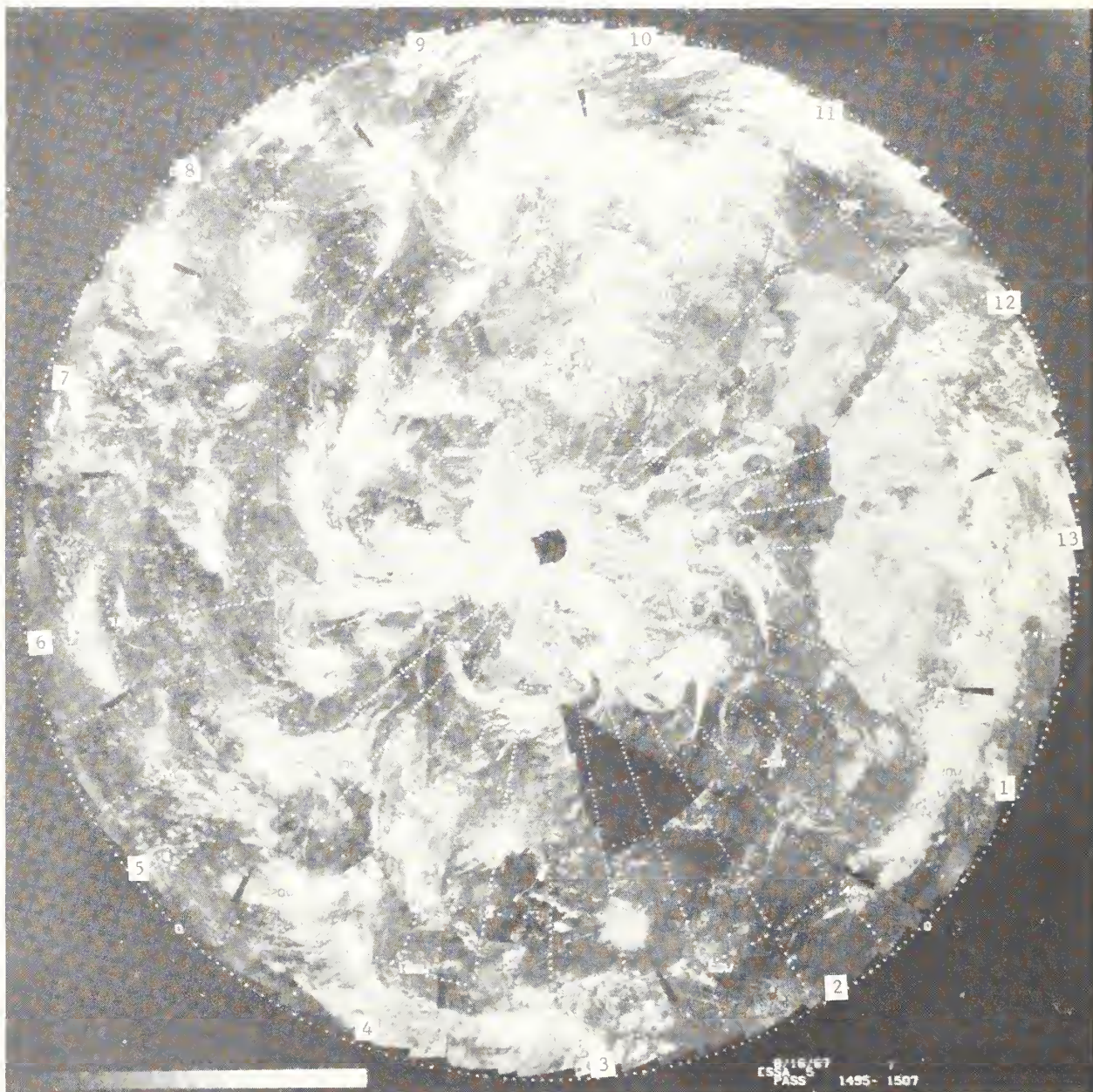


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ESA 5
PASS 1469- 1481

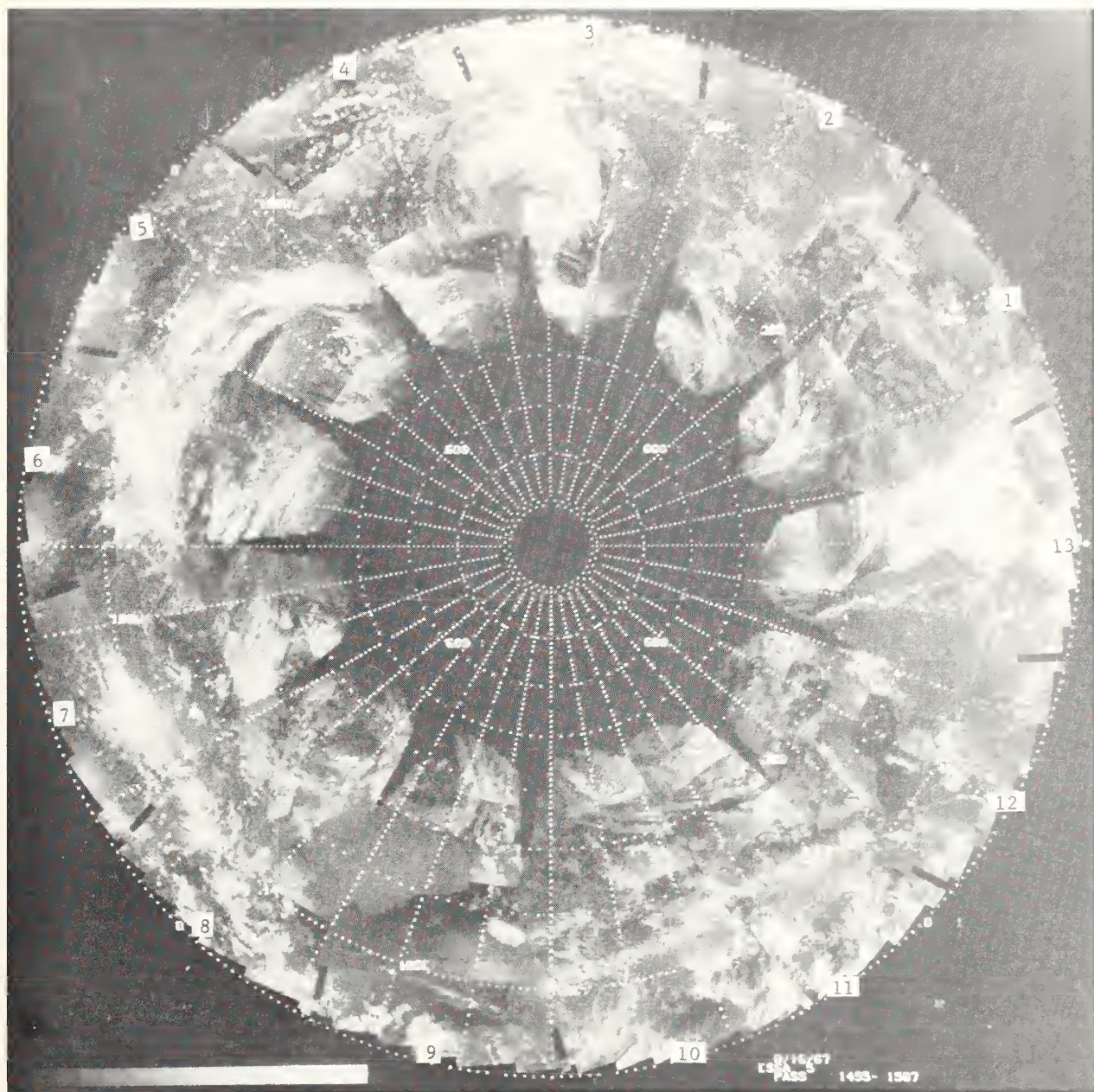


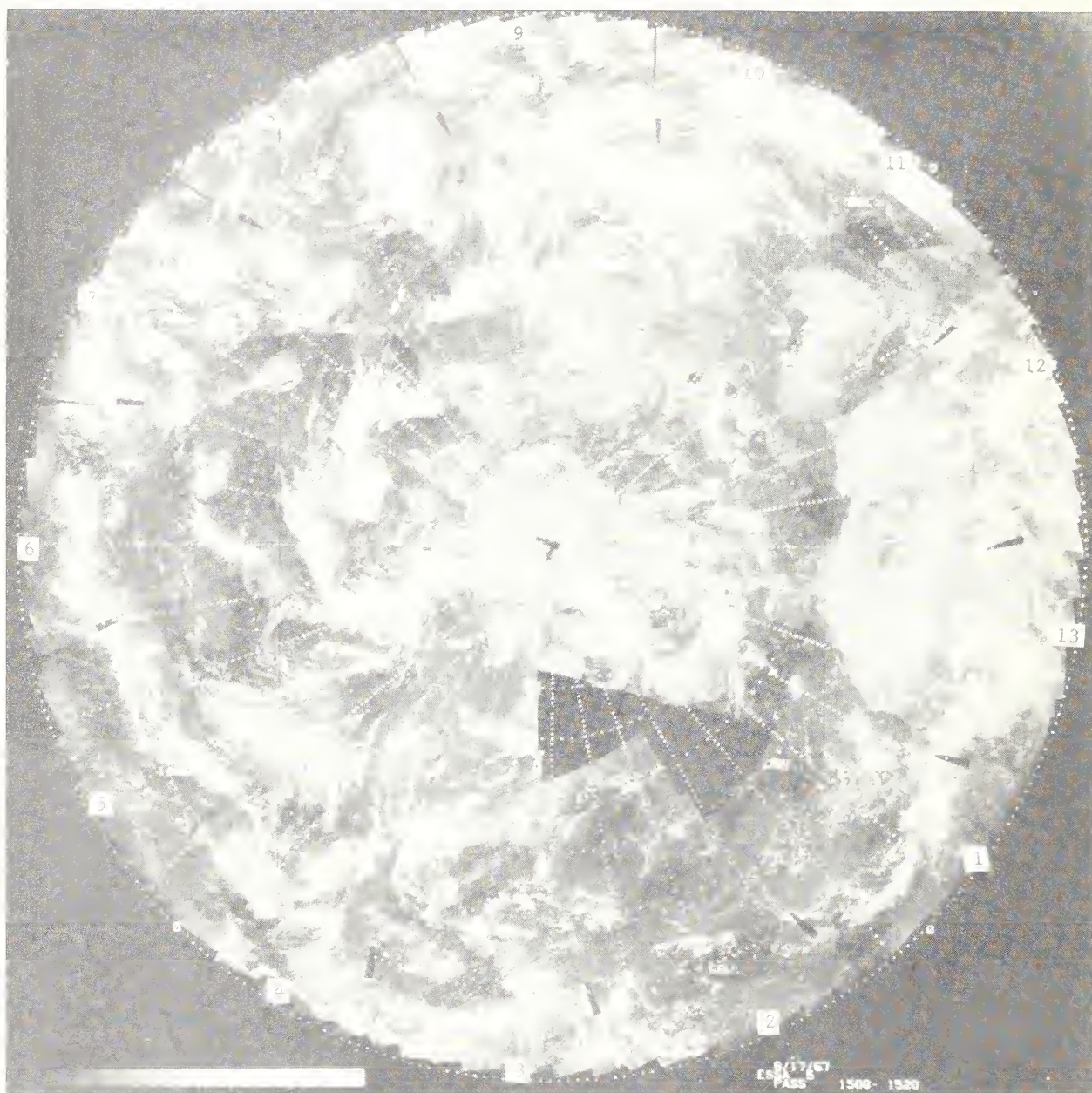


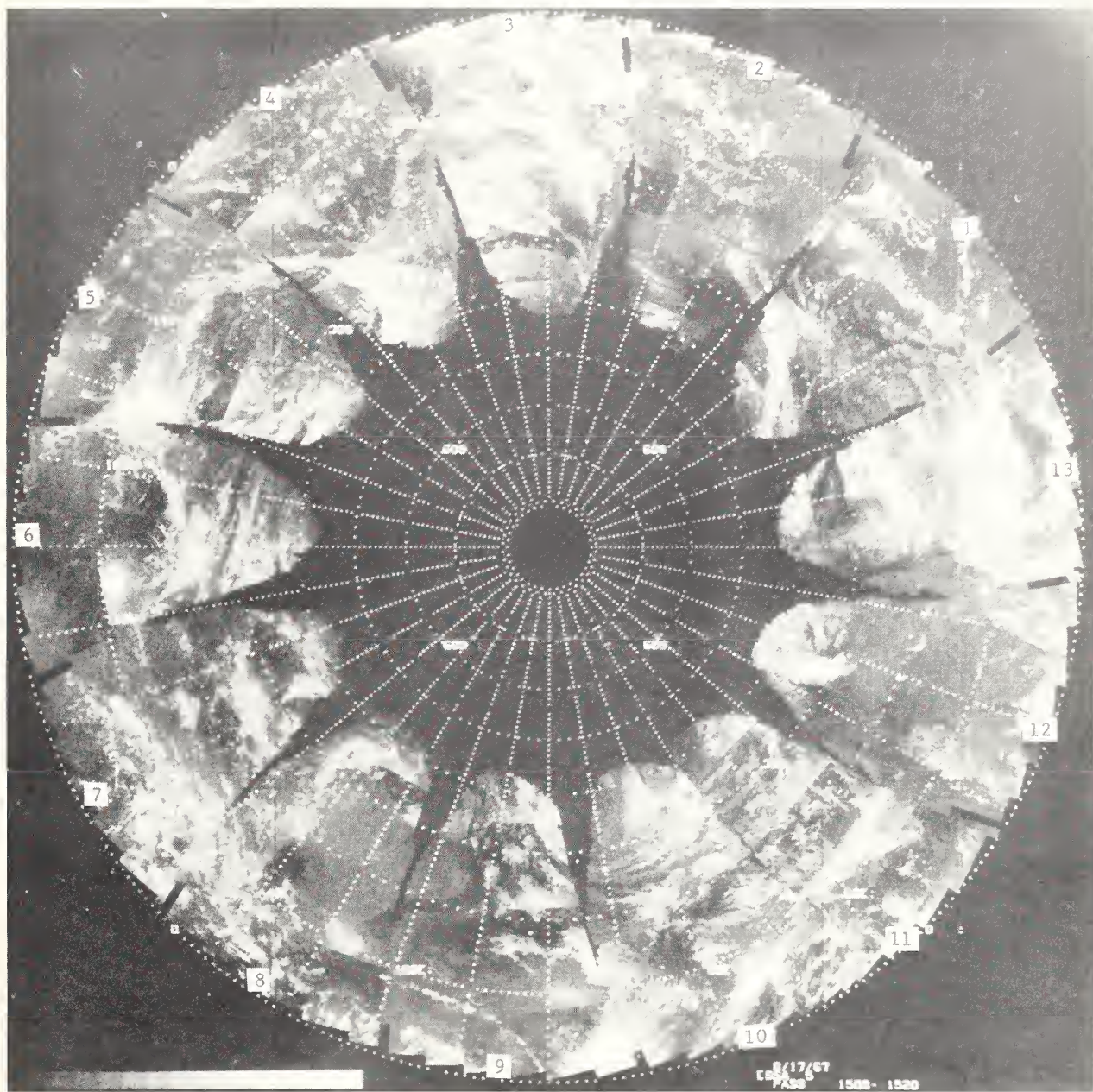


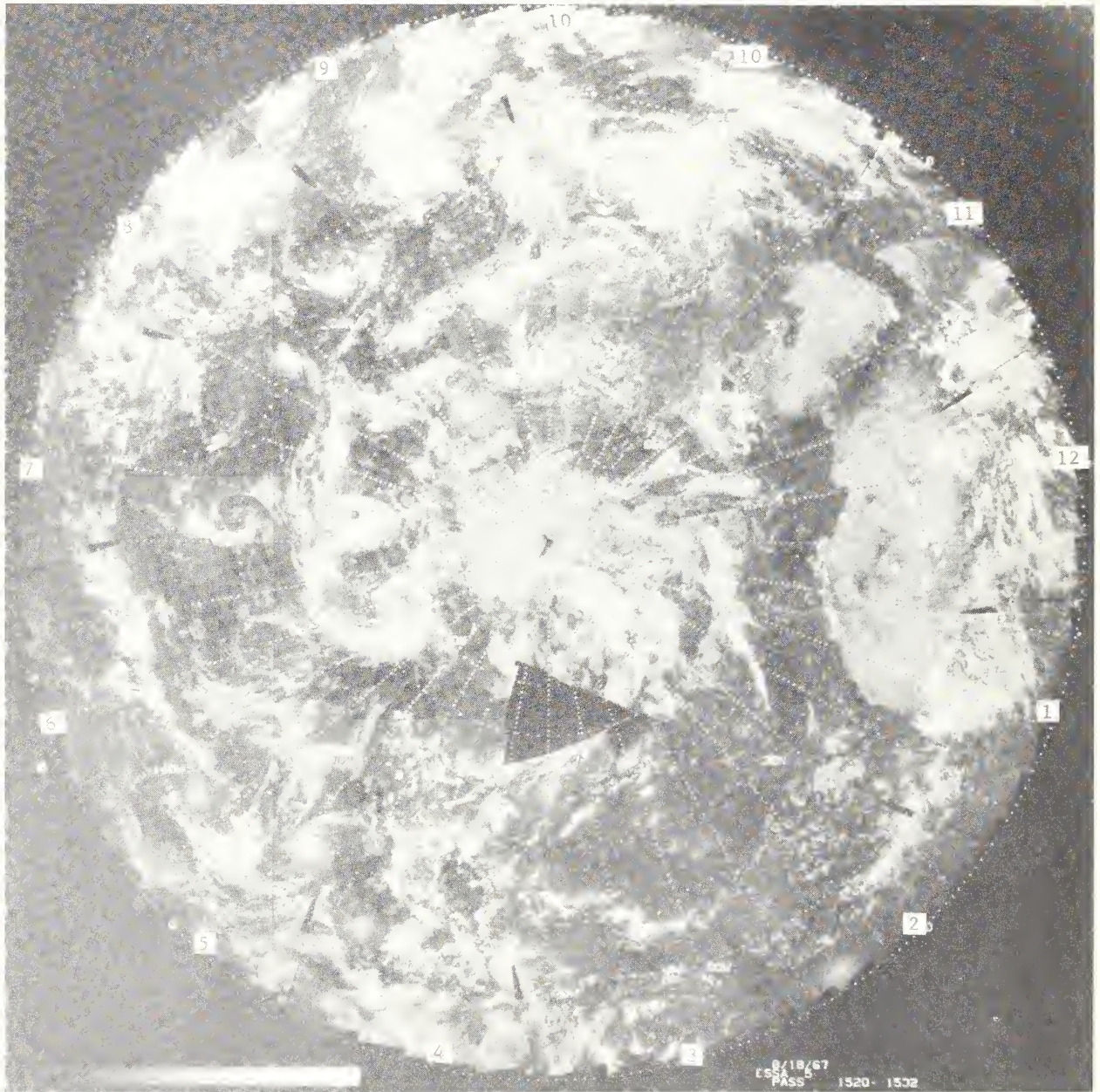


8-16-67
ESSA 5
PASS 1495-1507

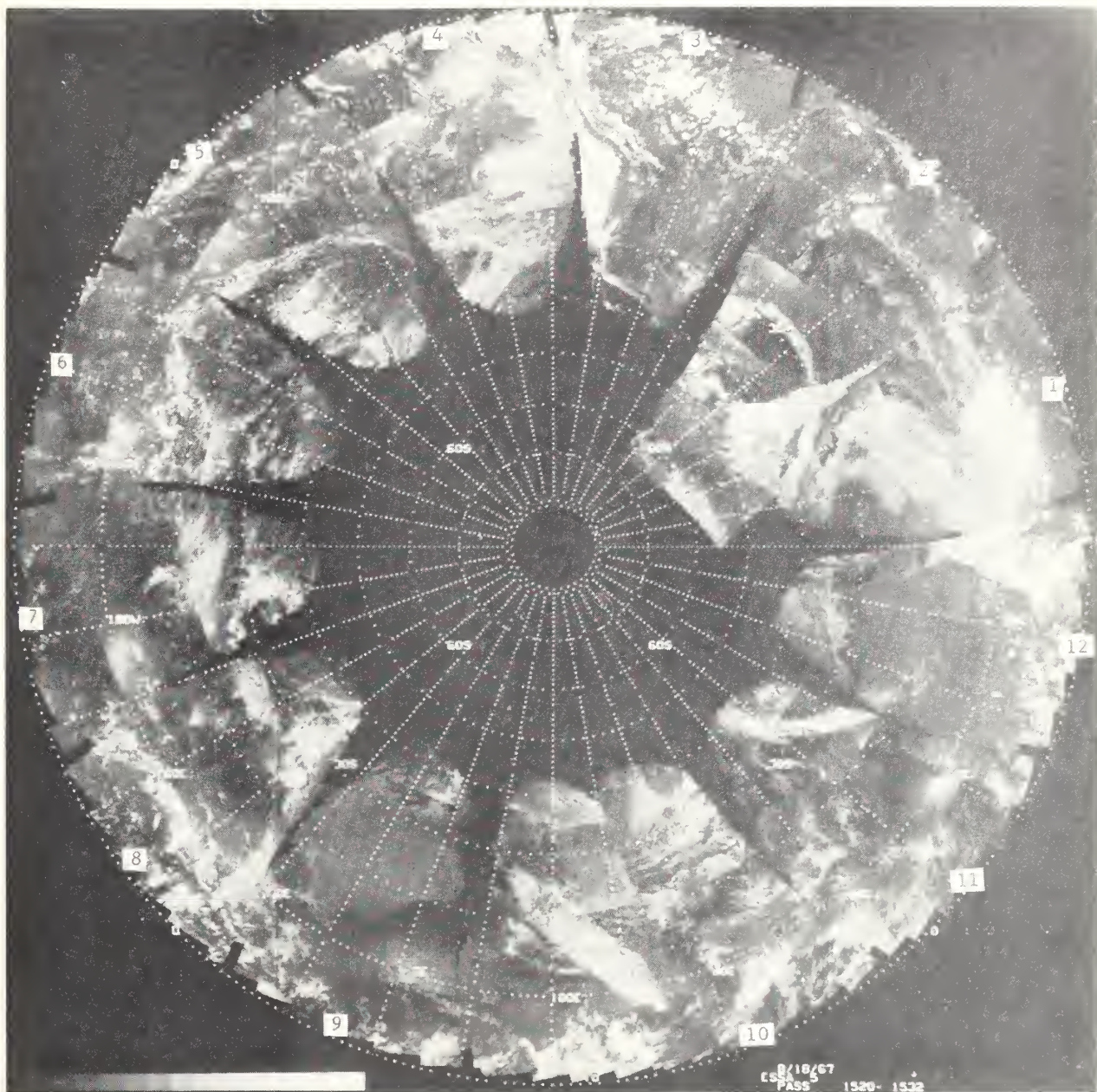




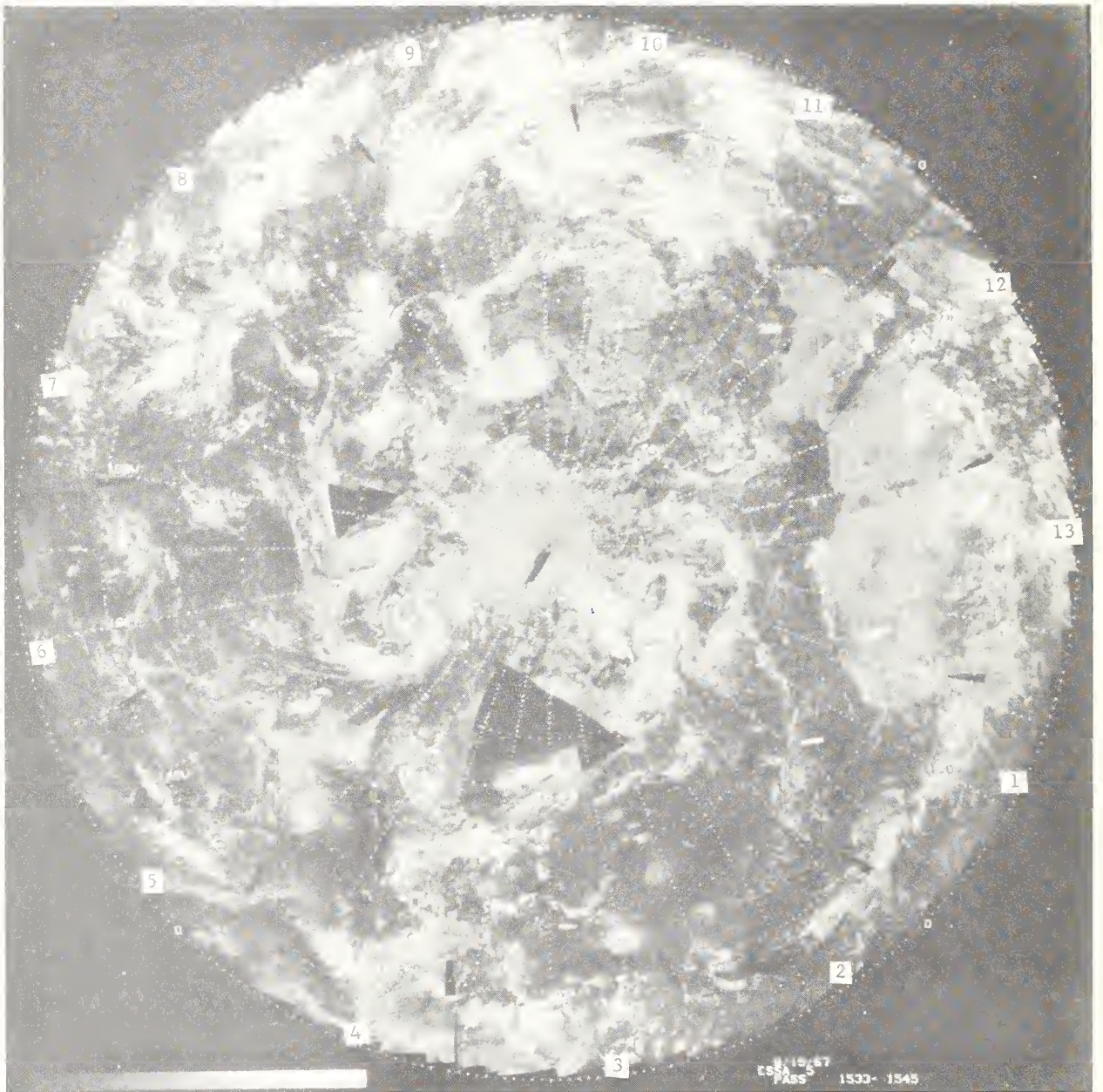




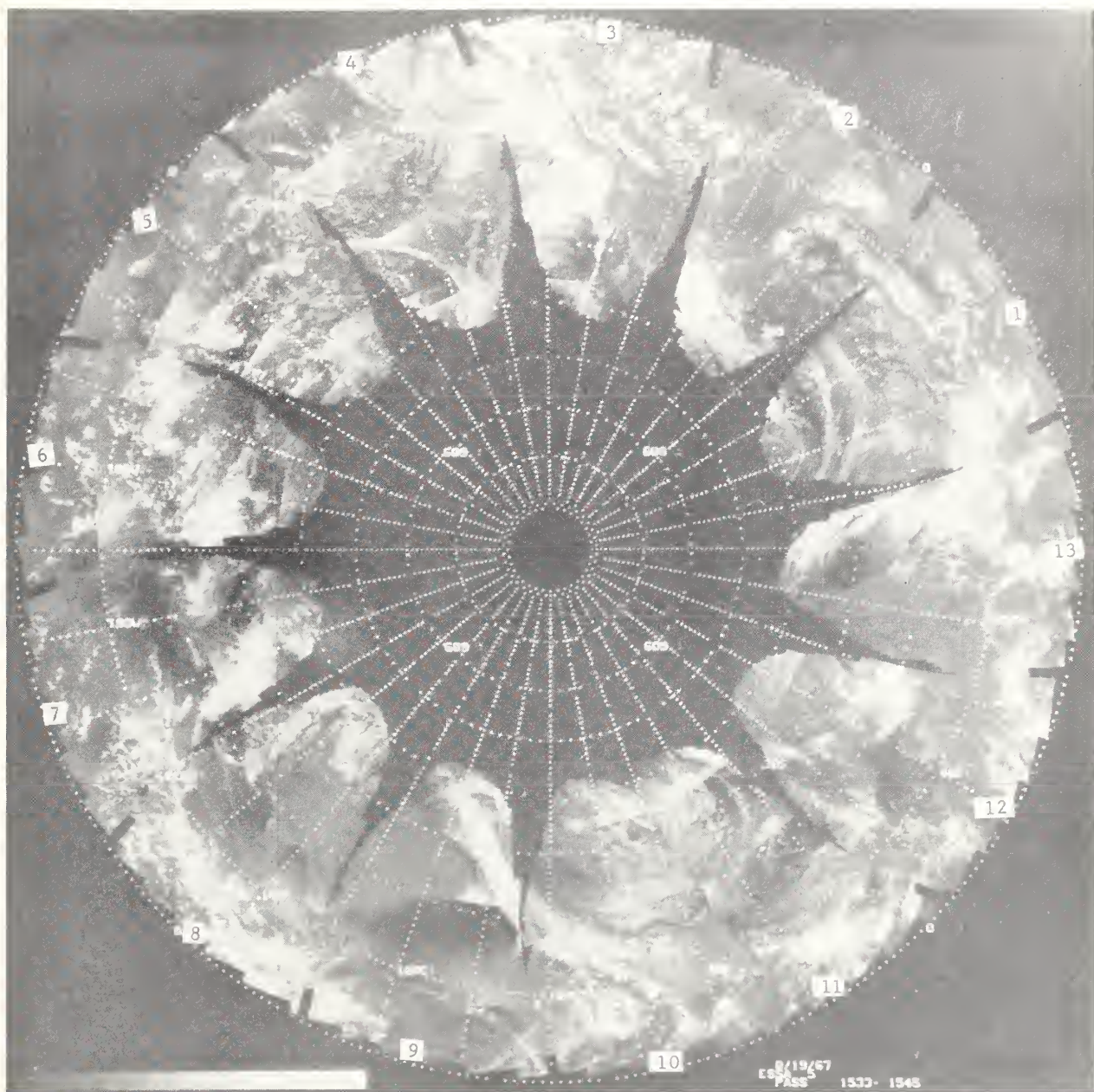
8/18/67
ESS
PASS 1520-1532

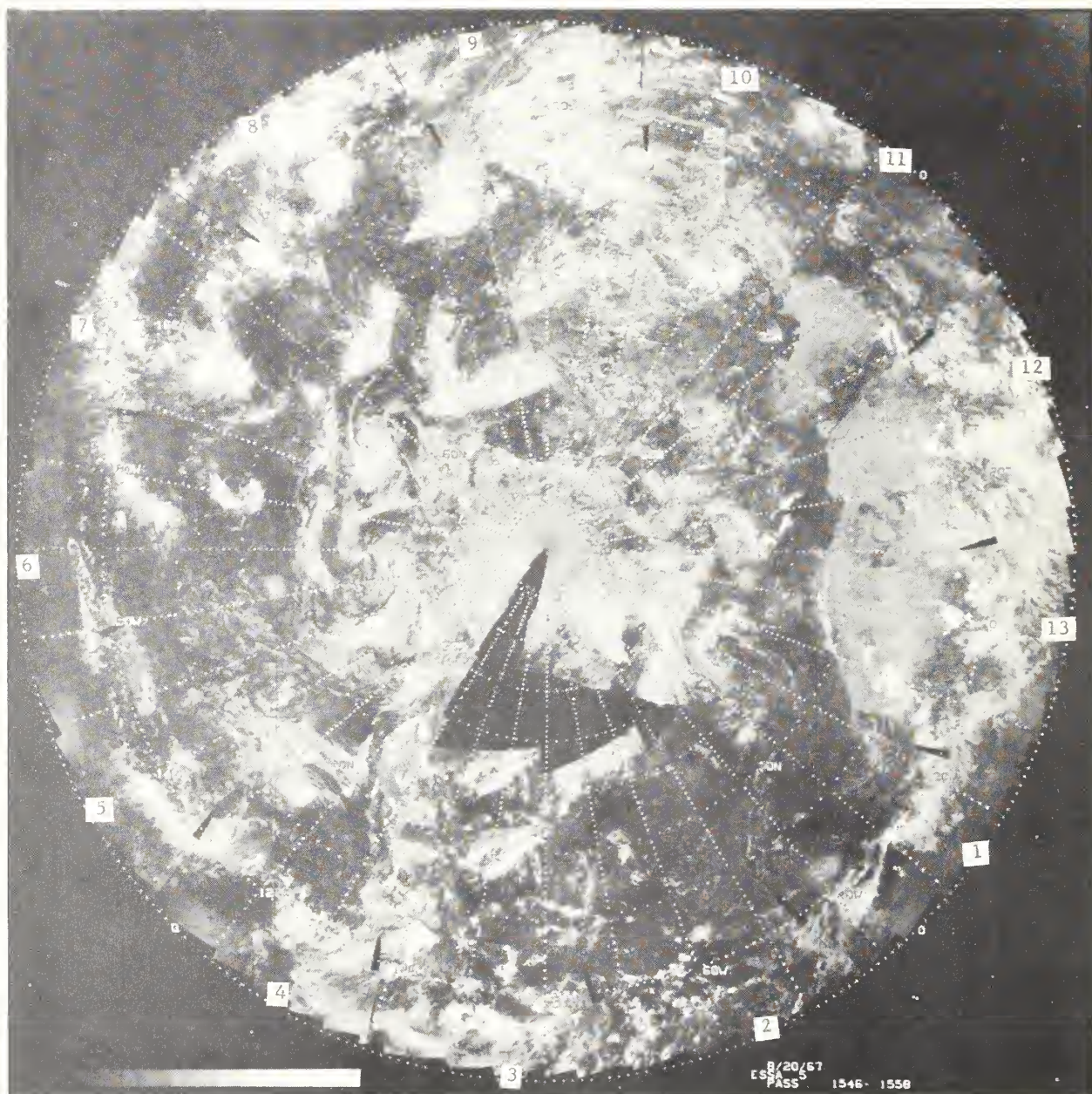


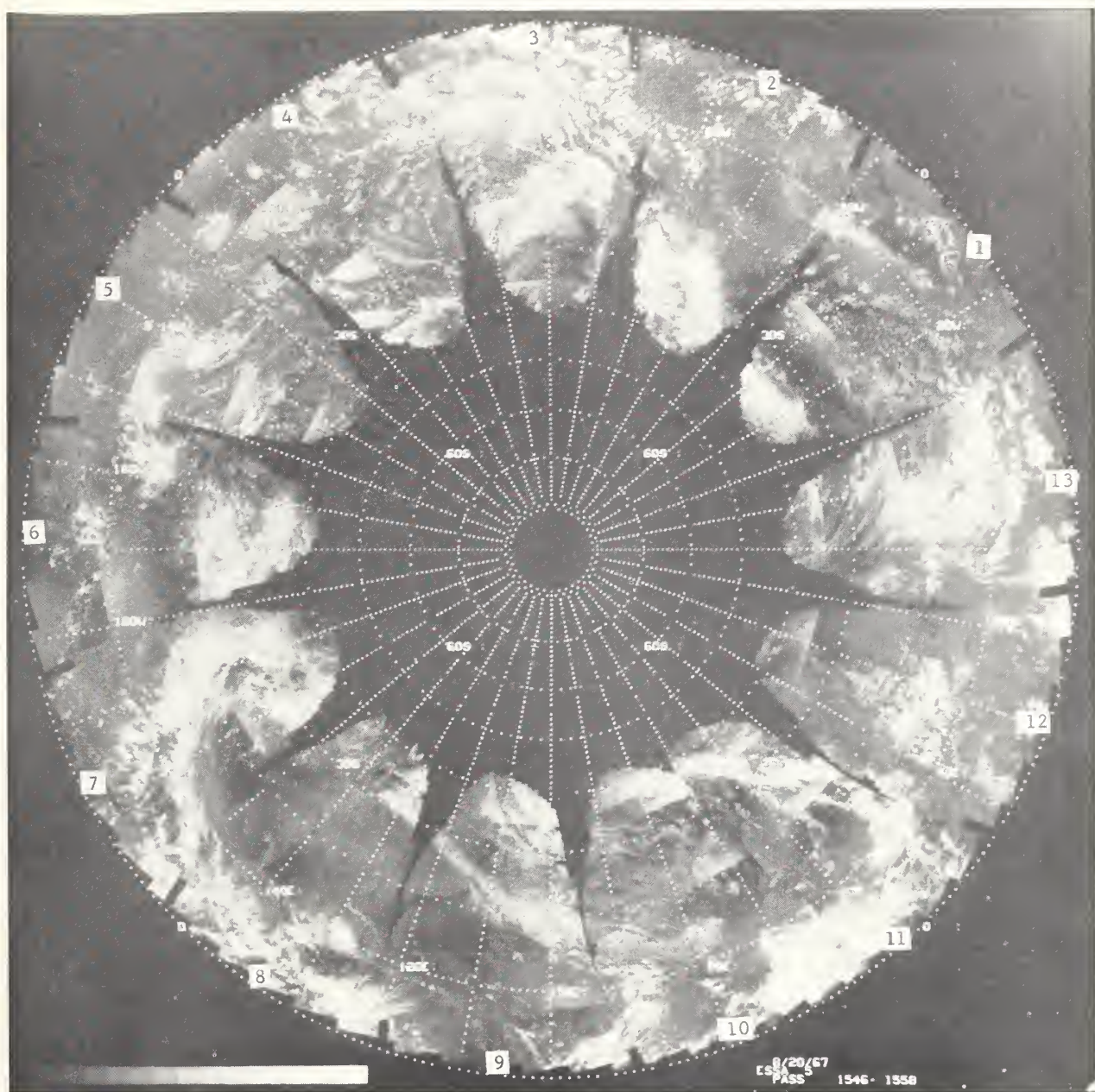
8/16/67
PASS 1520-1532

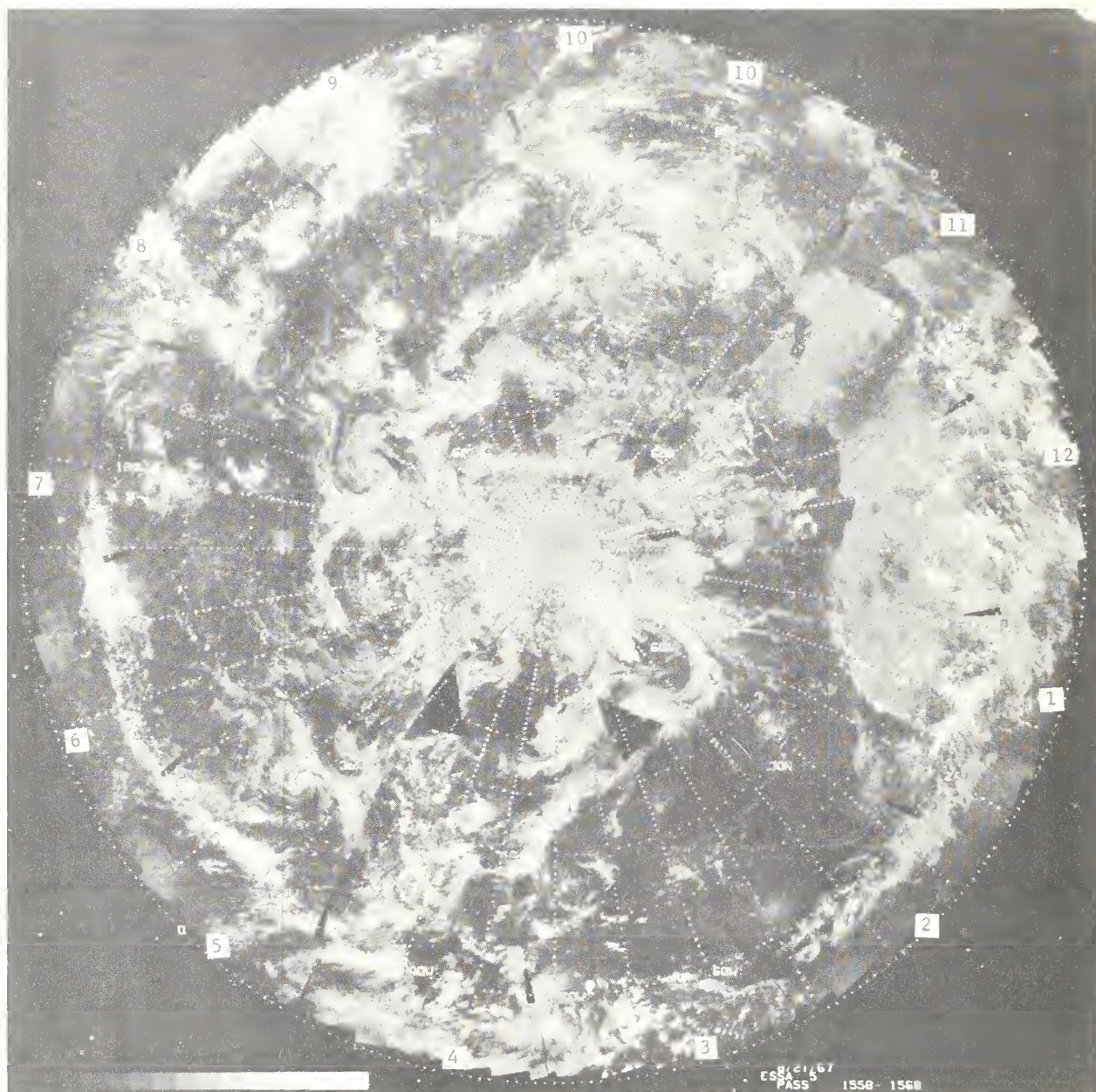


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CSA
1533-1545

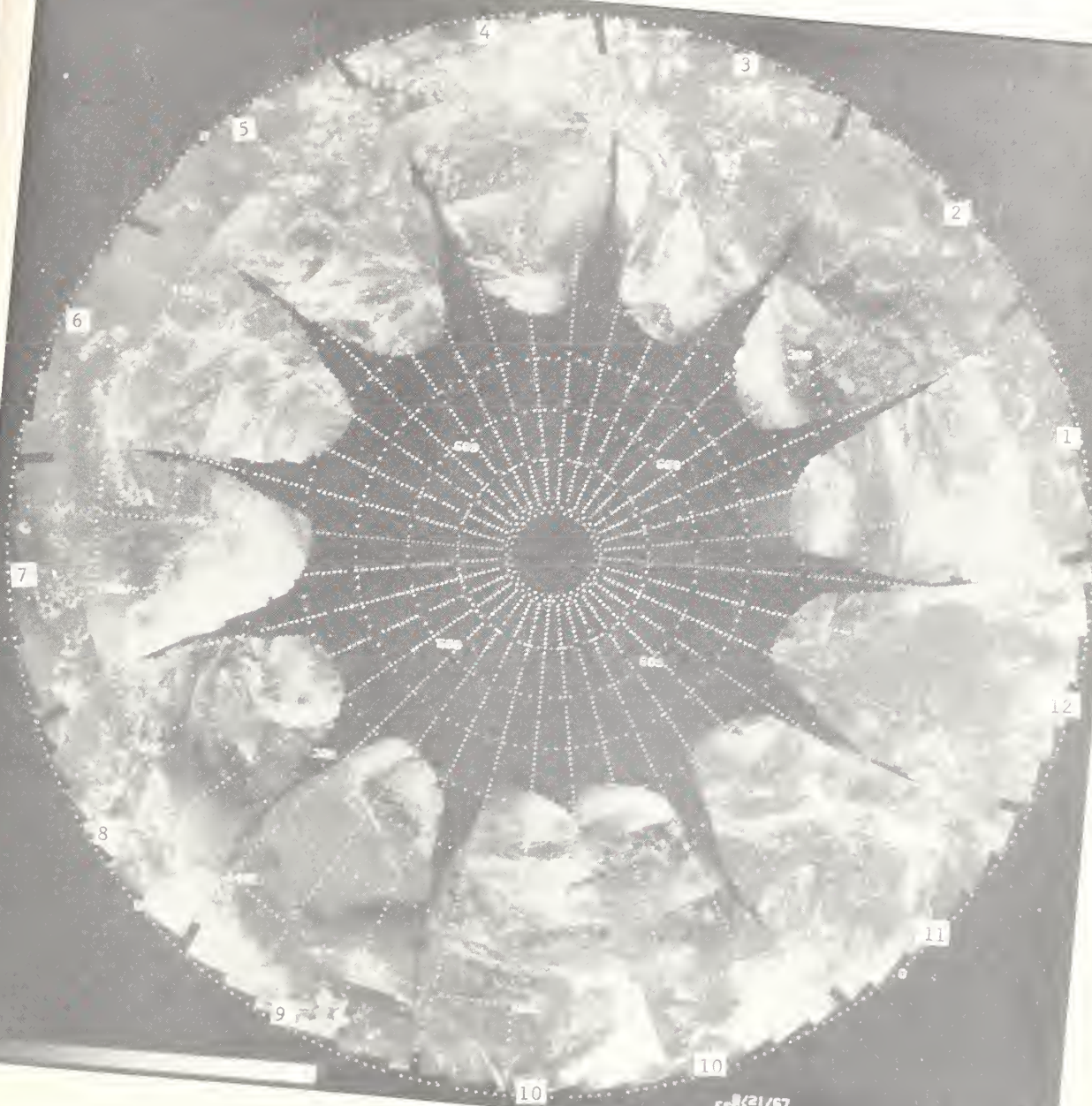








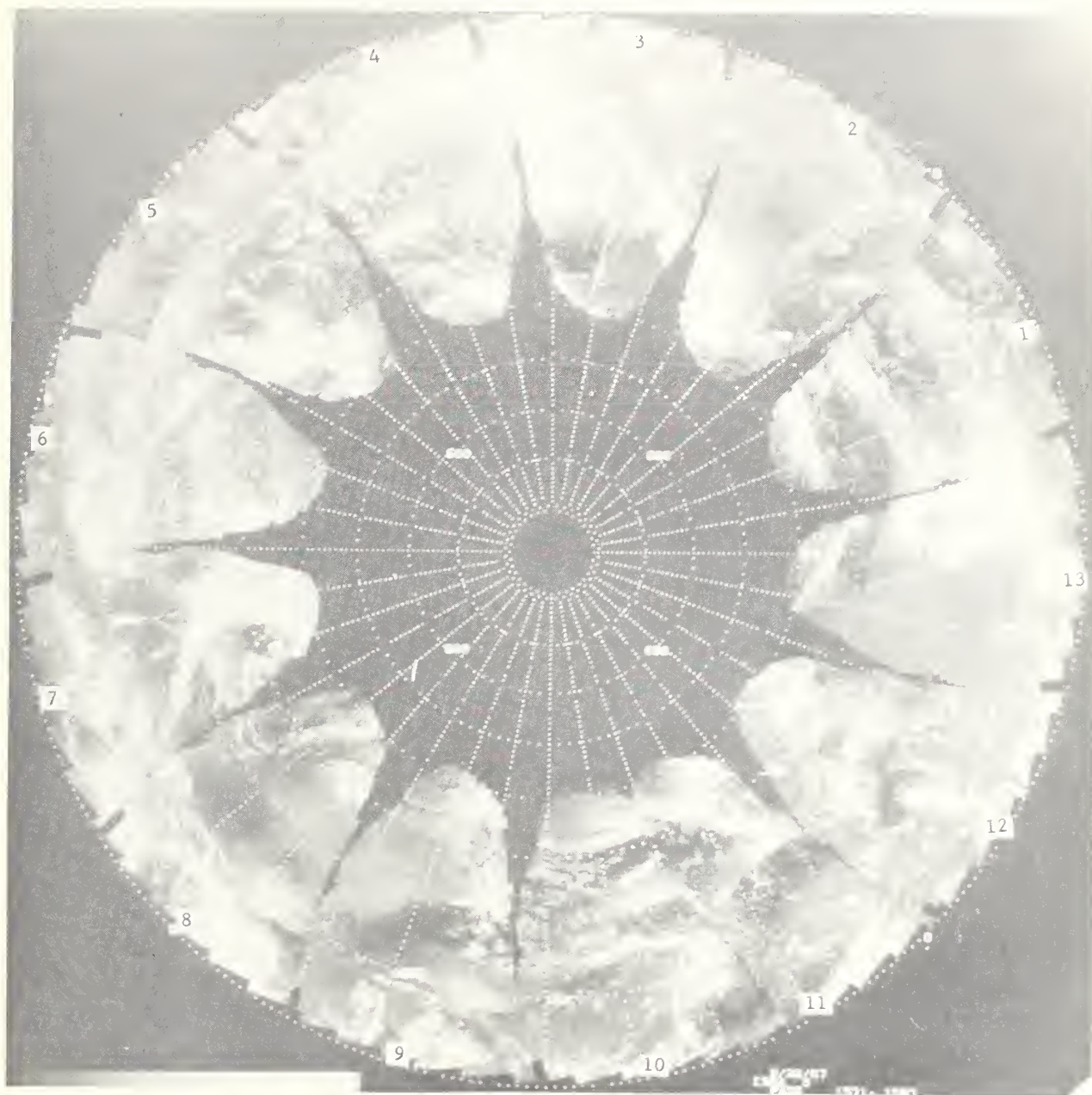
8/21/67
ESSA 5
PASS 1558- 1568

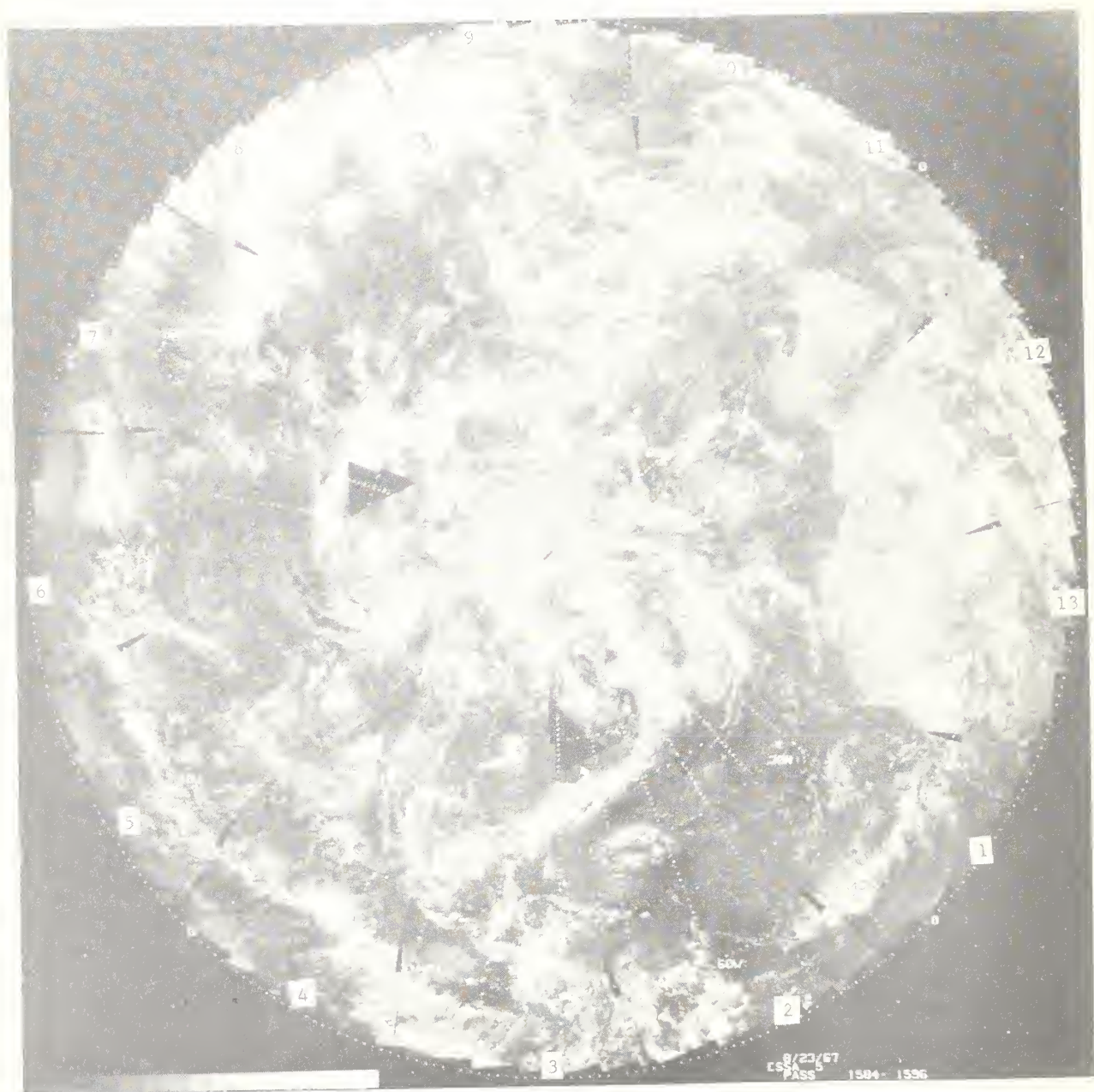


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ESSA
PAGE 5
1550- 1560

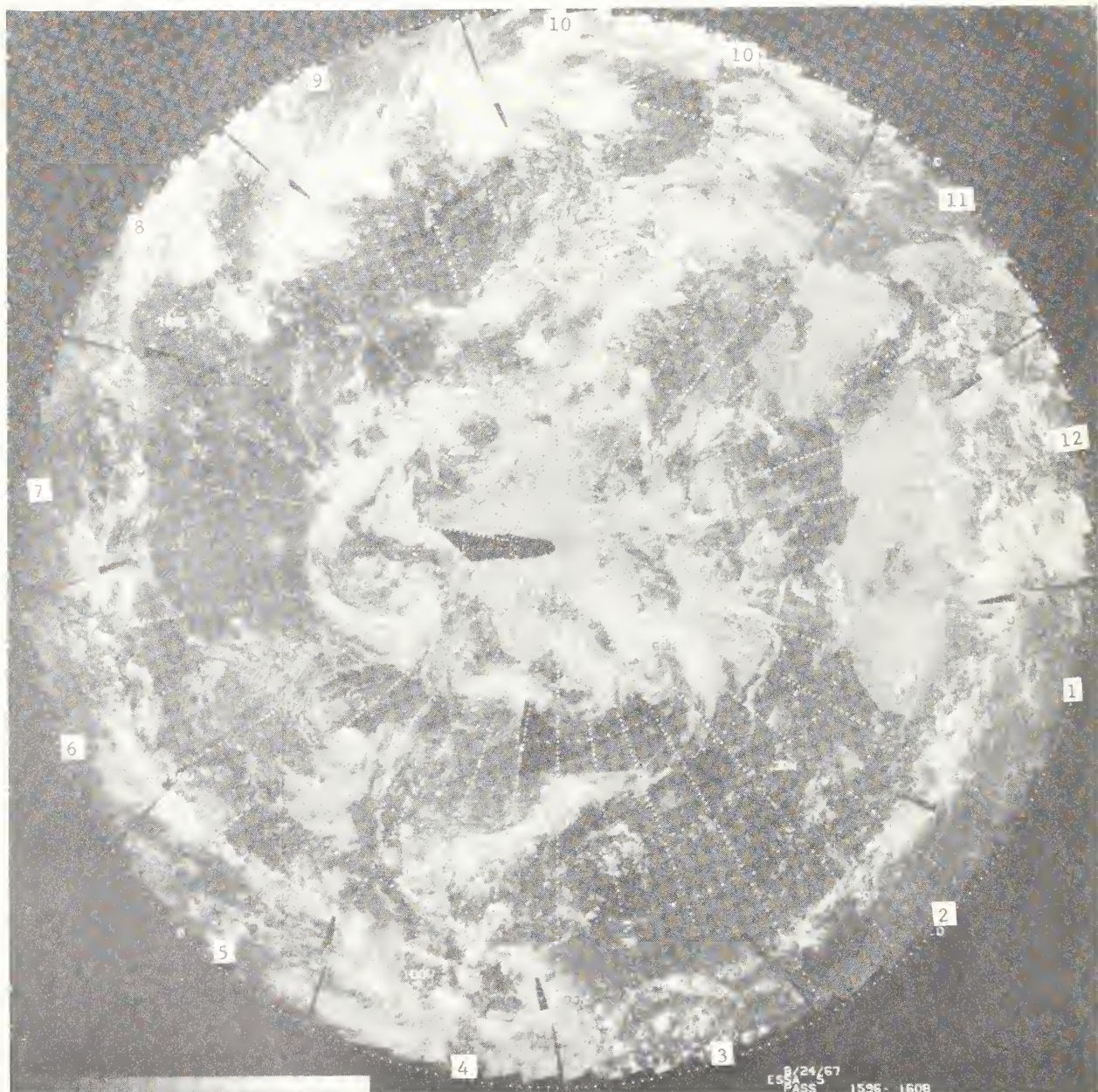


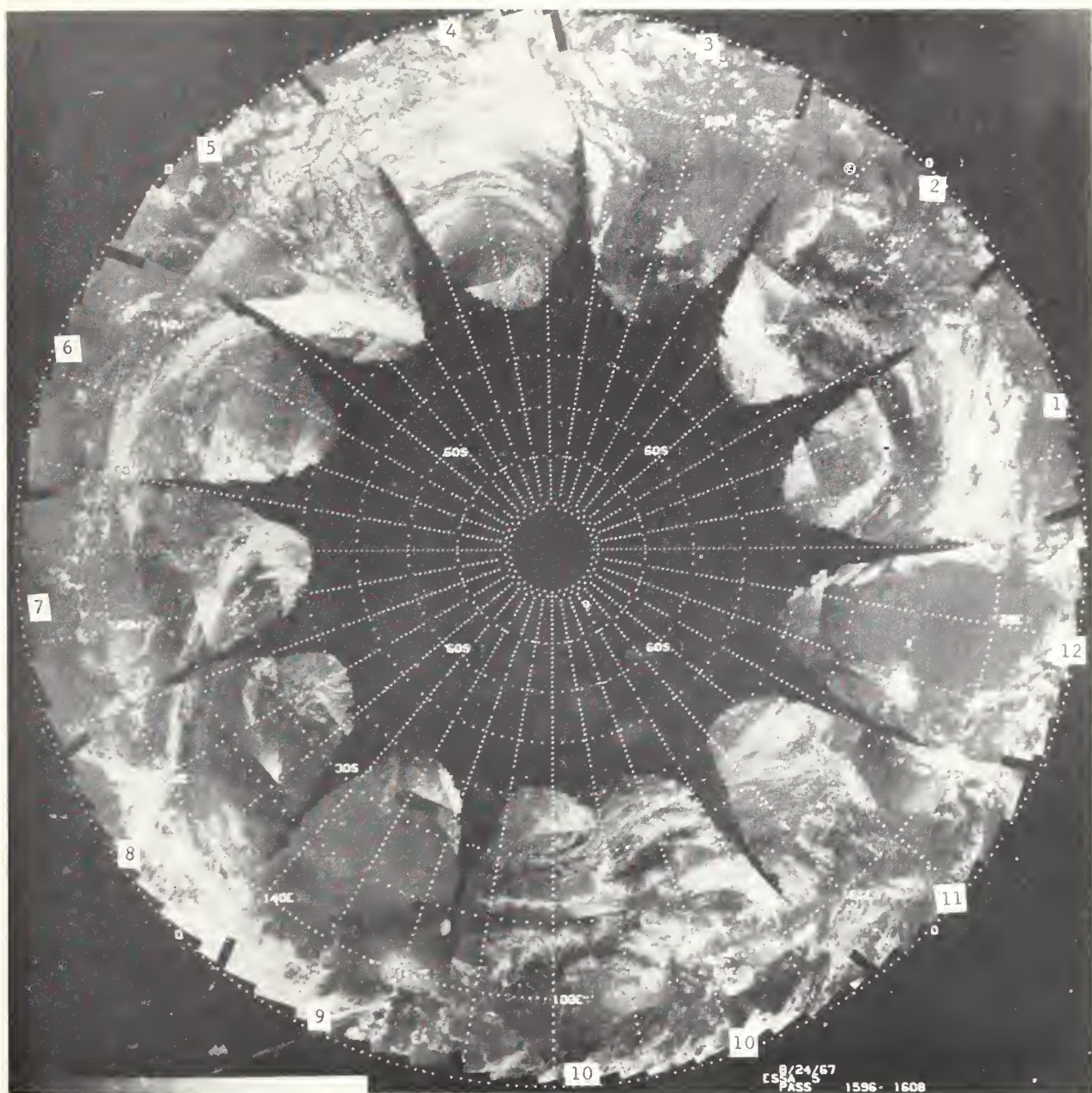
8/22/67
PASS 5
1571-1583

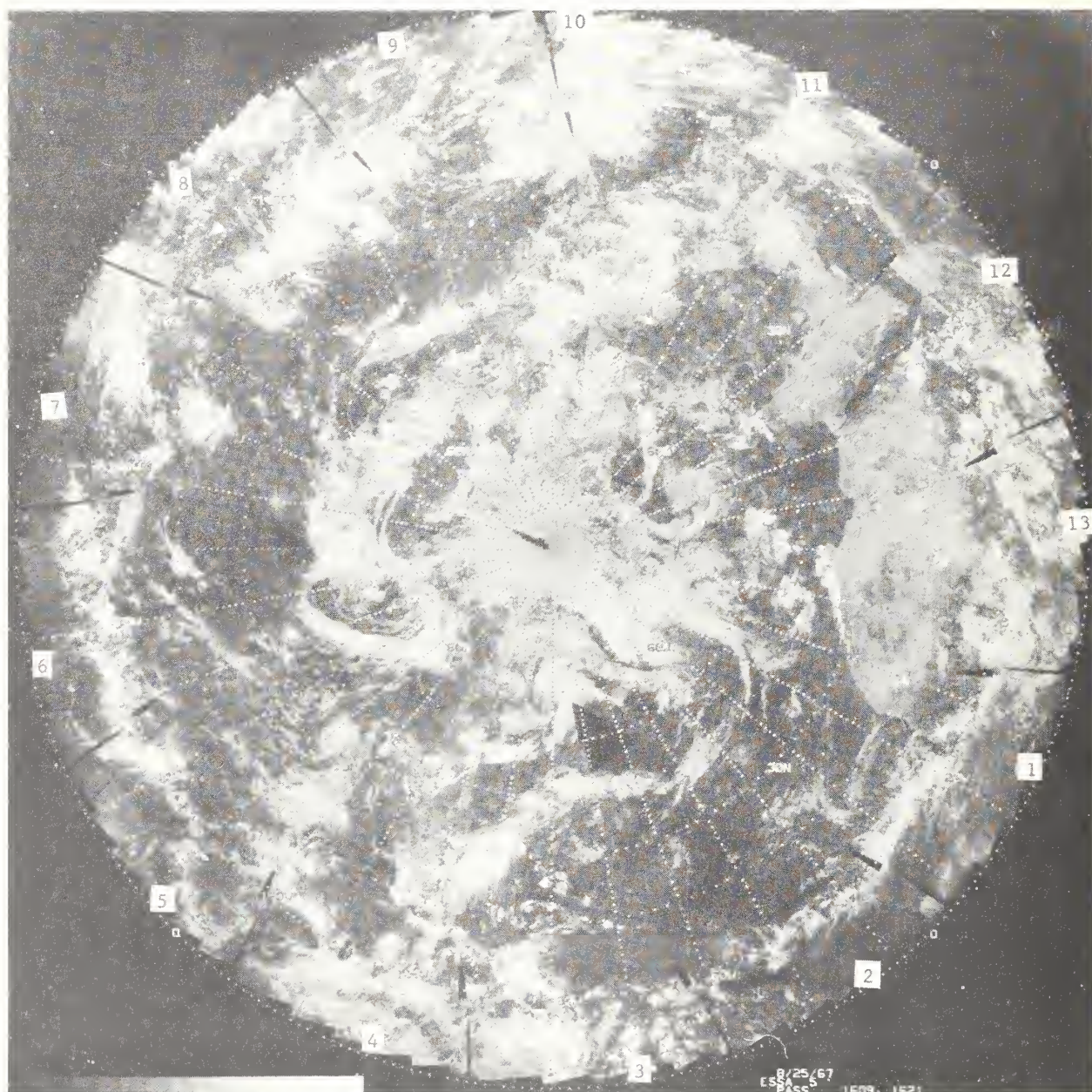


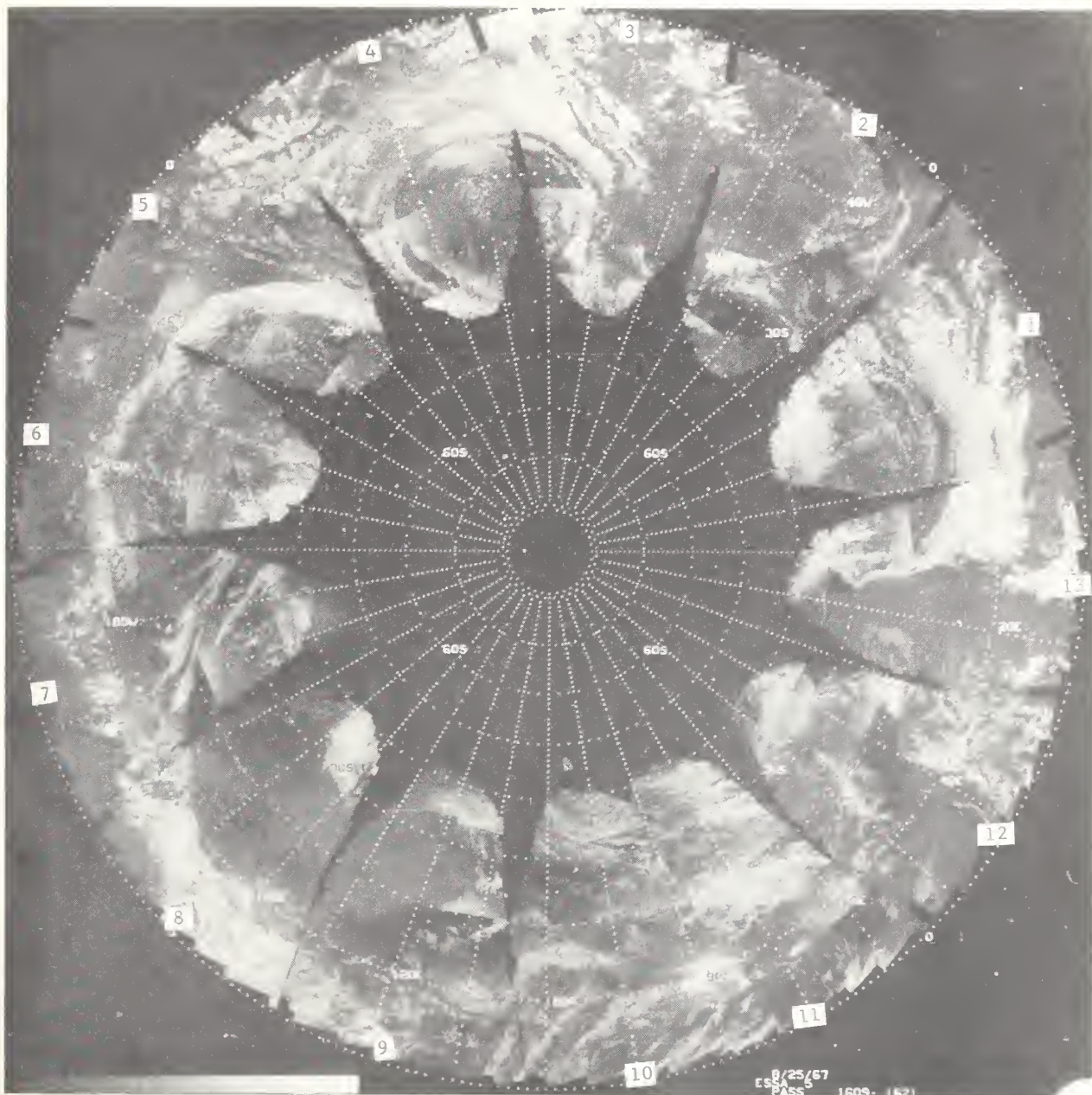




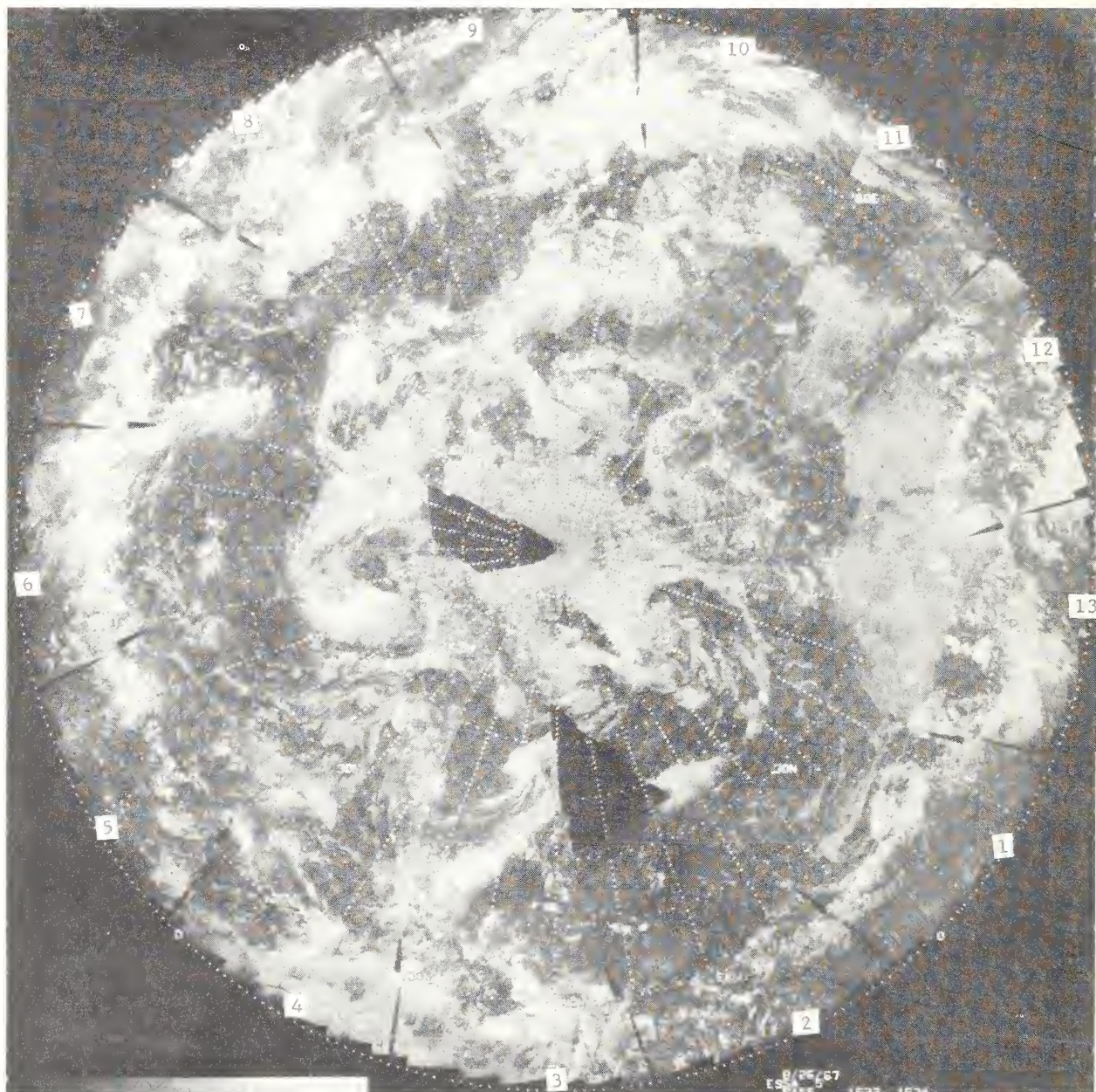


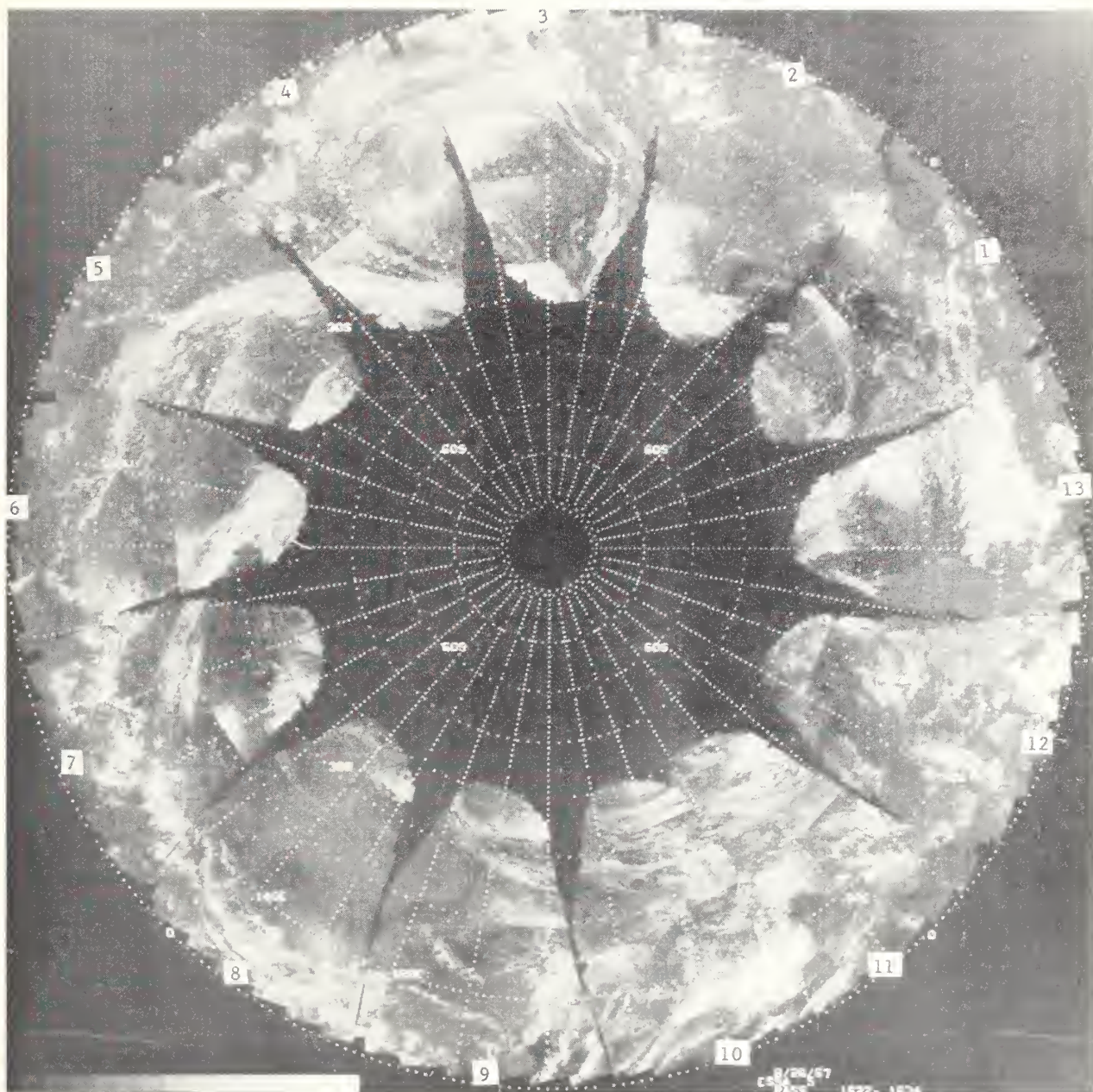


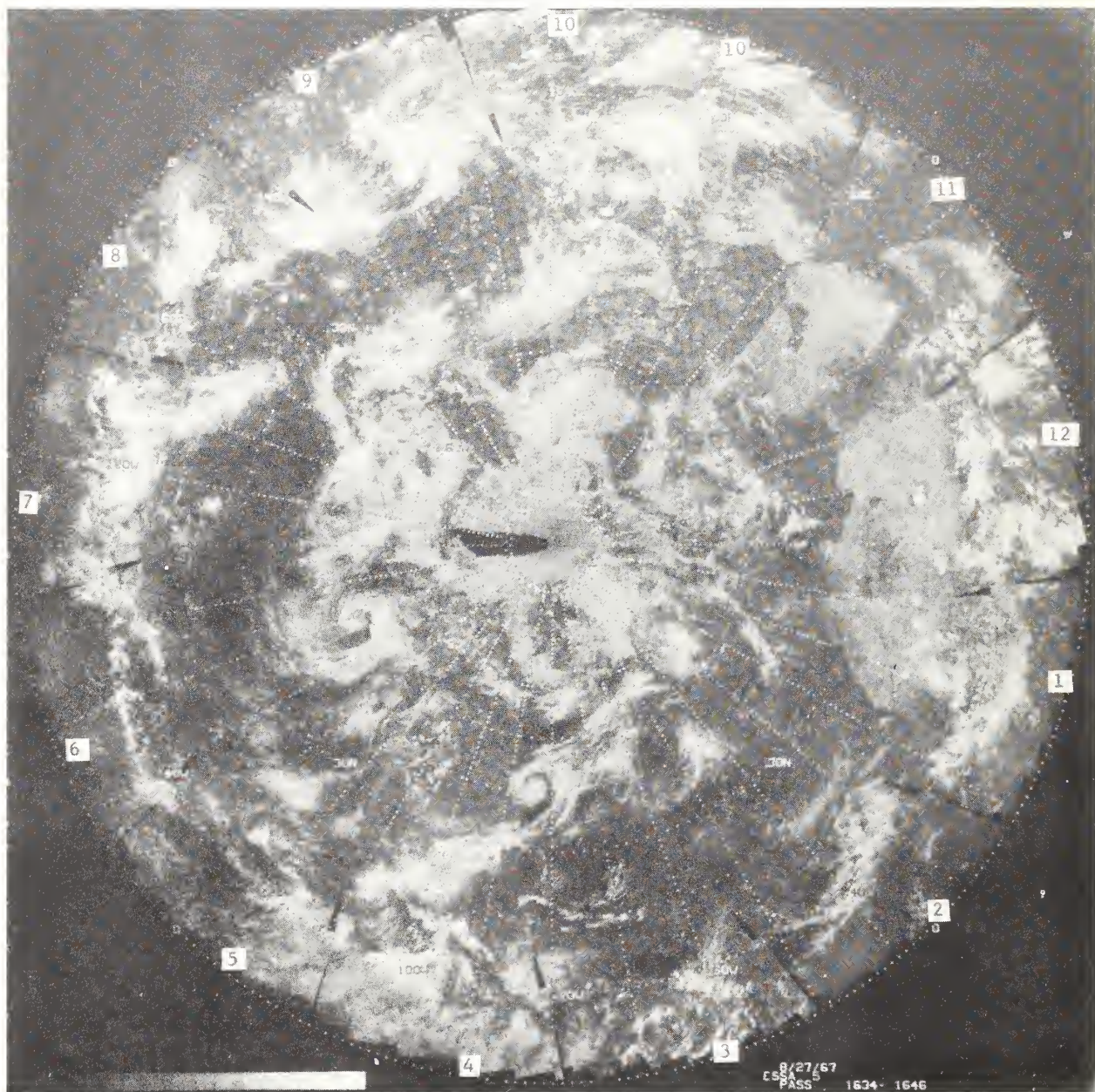


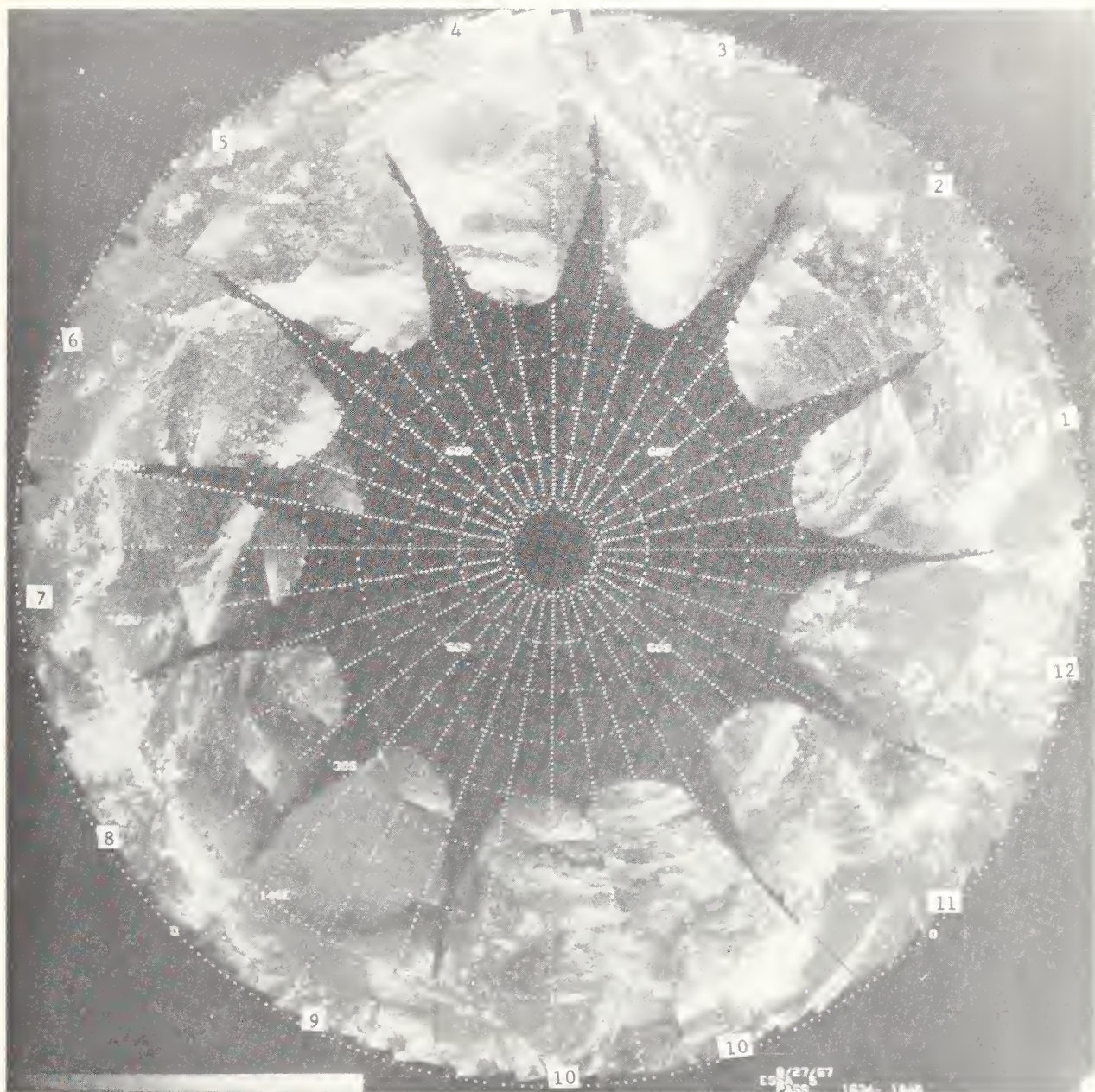


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ESSA 5
PASS 1609-1621

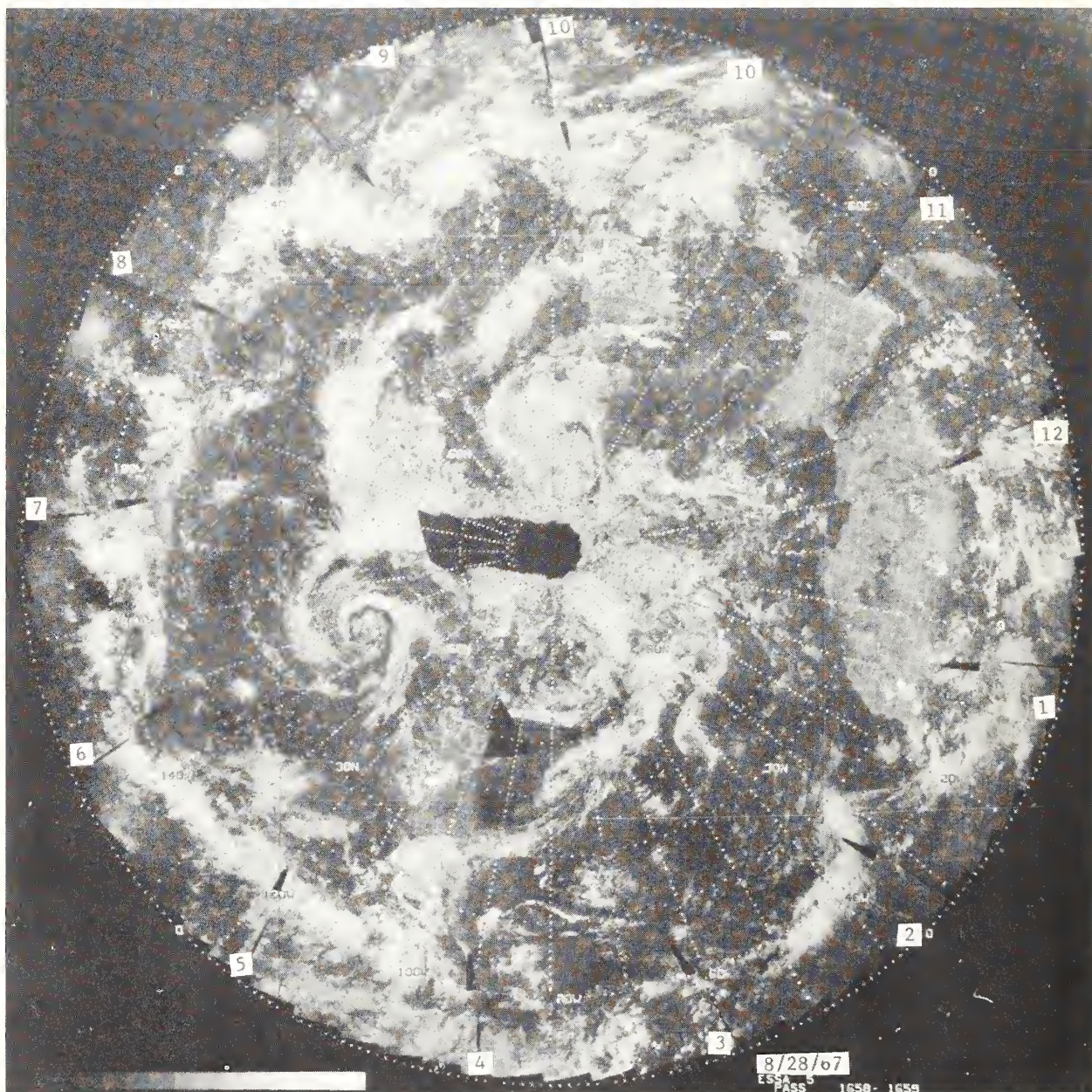


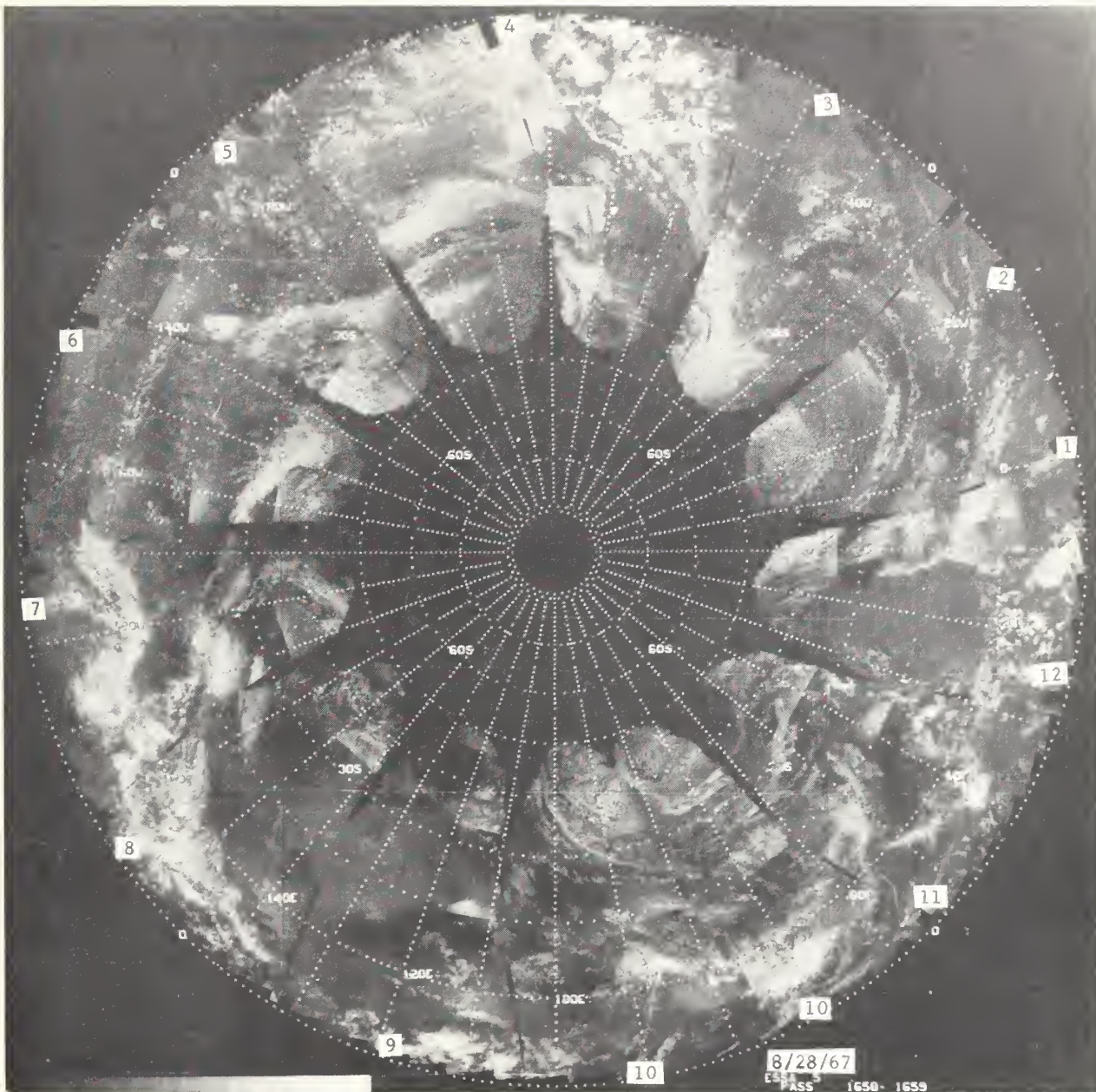


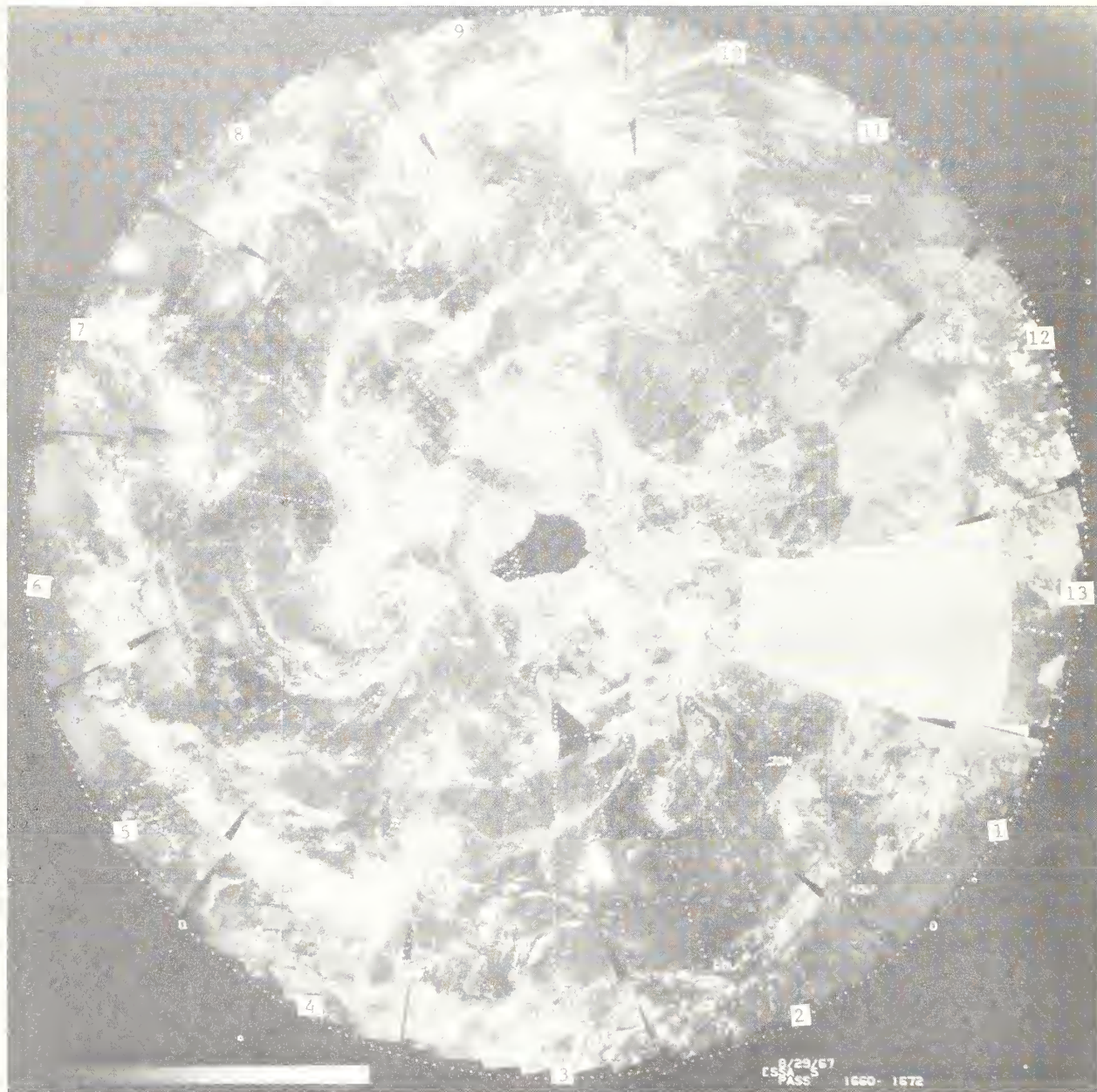


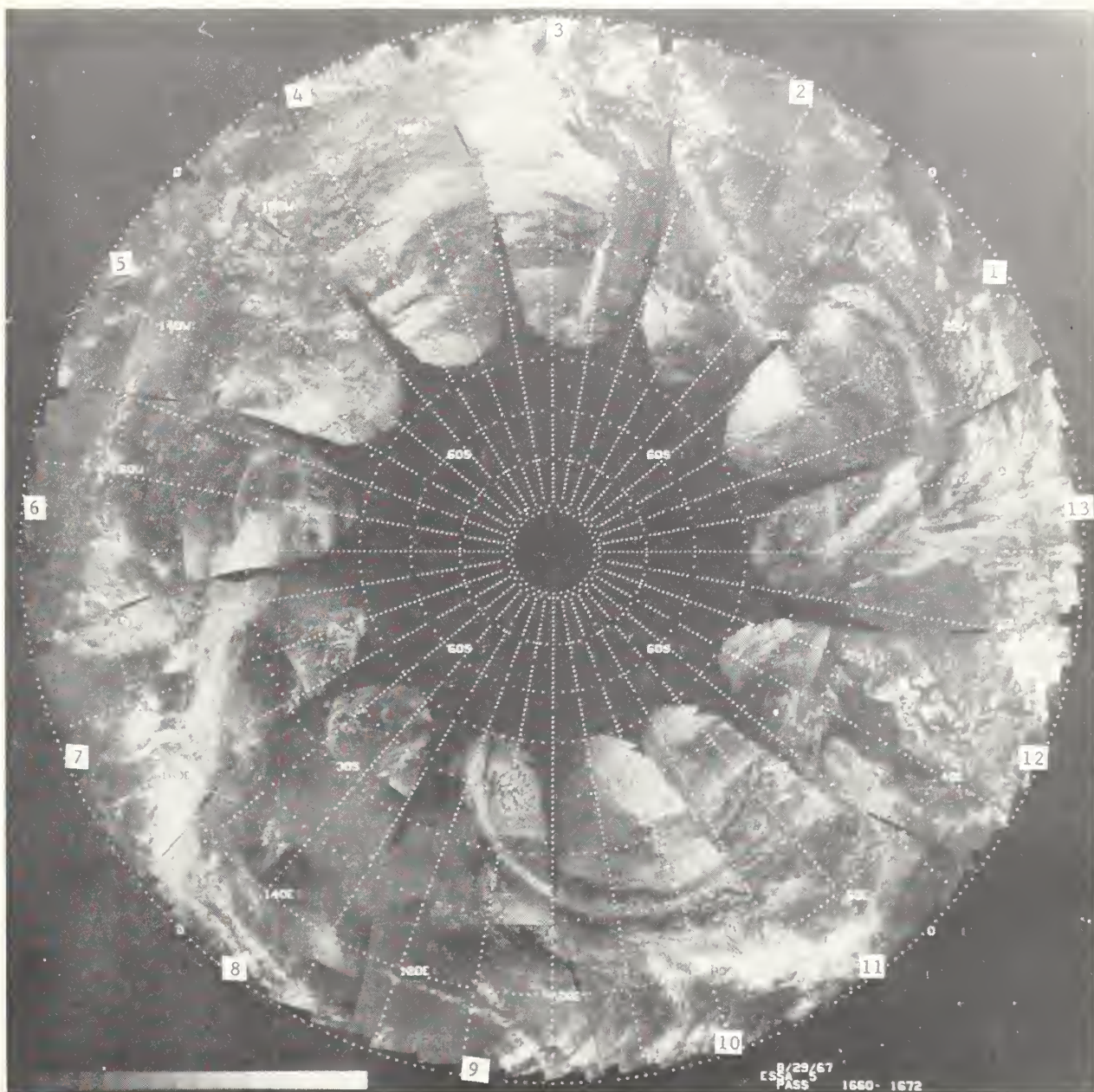


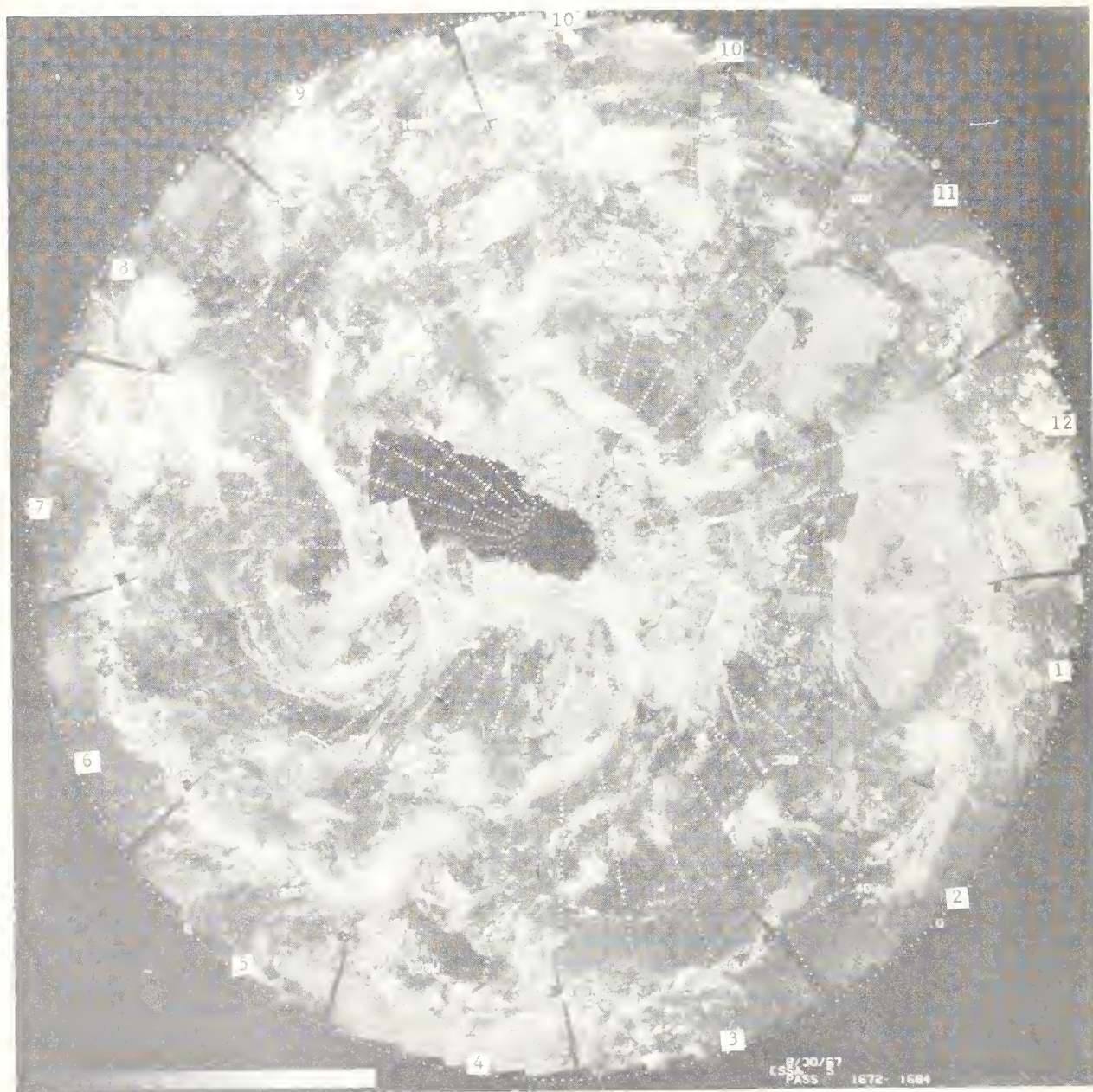
8/27/67
E555
PASS 1874-1875

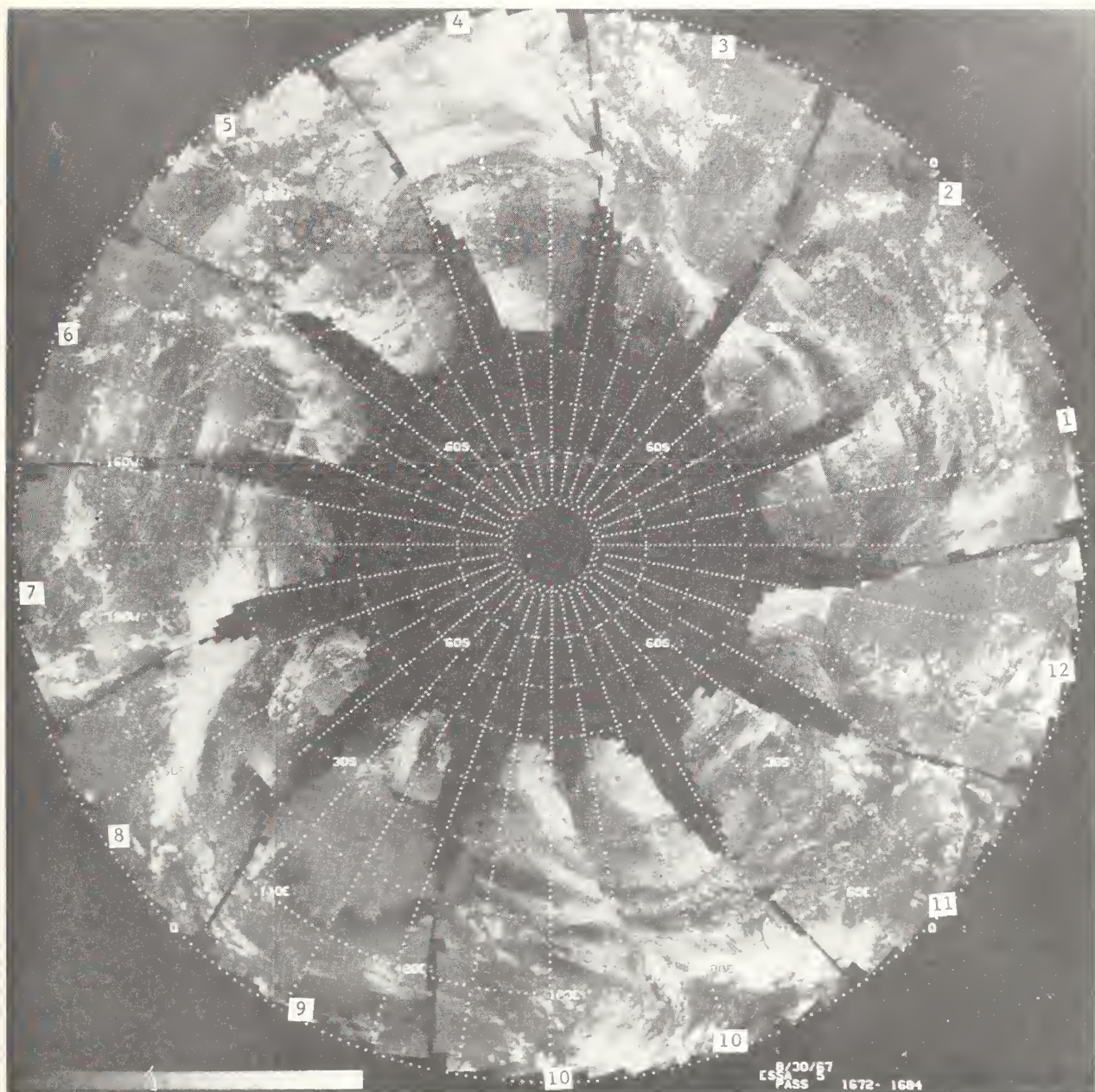


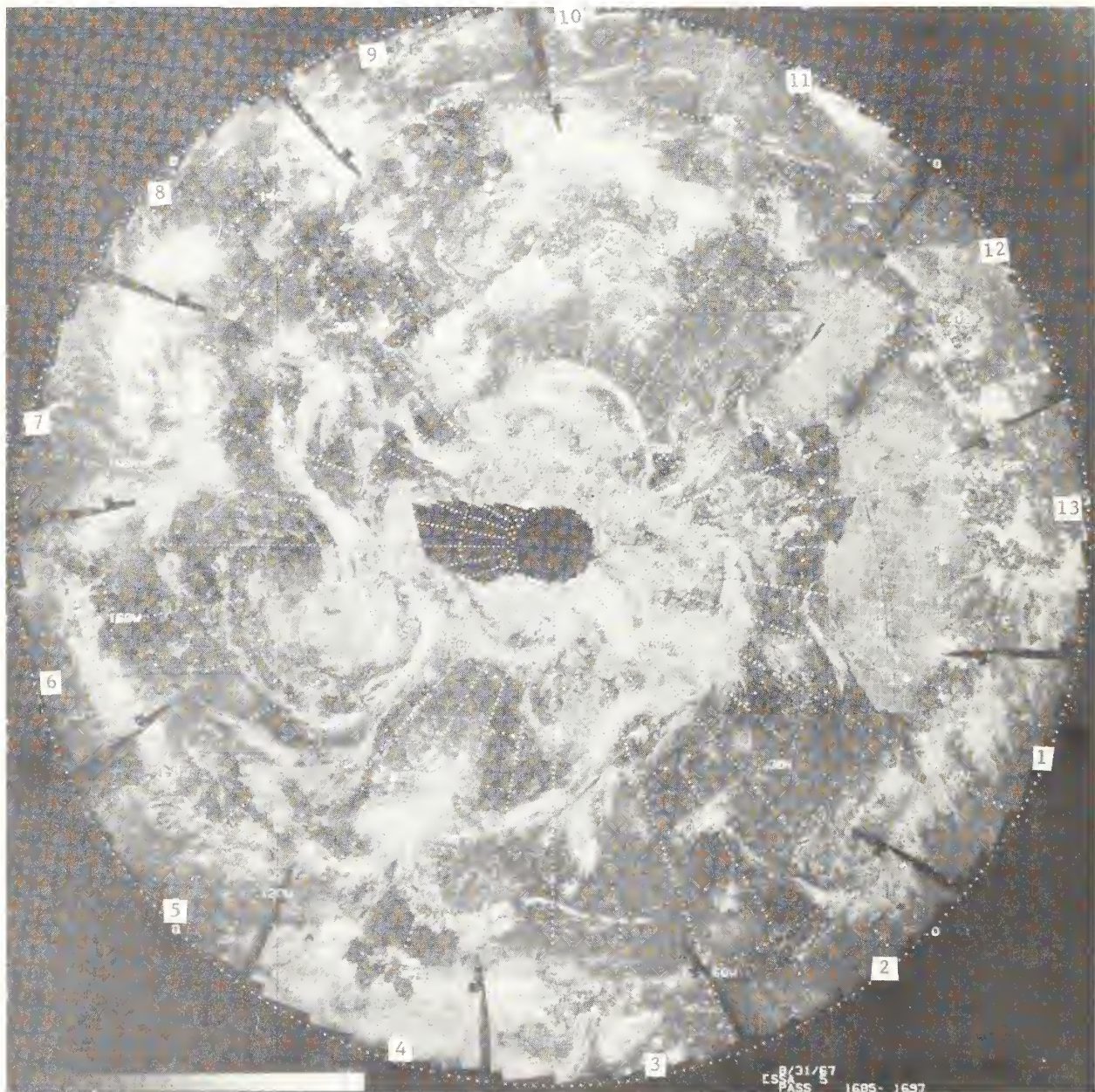




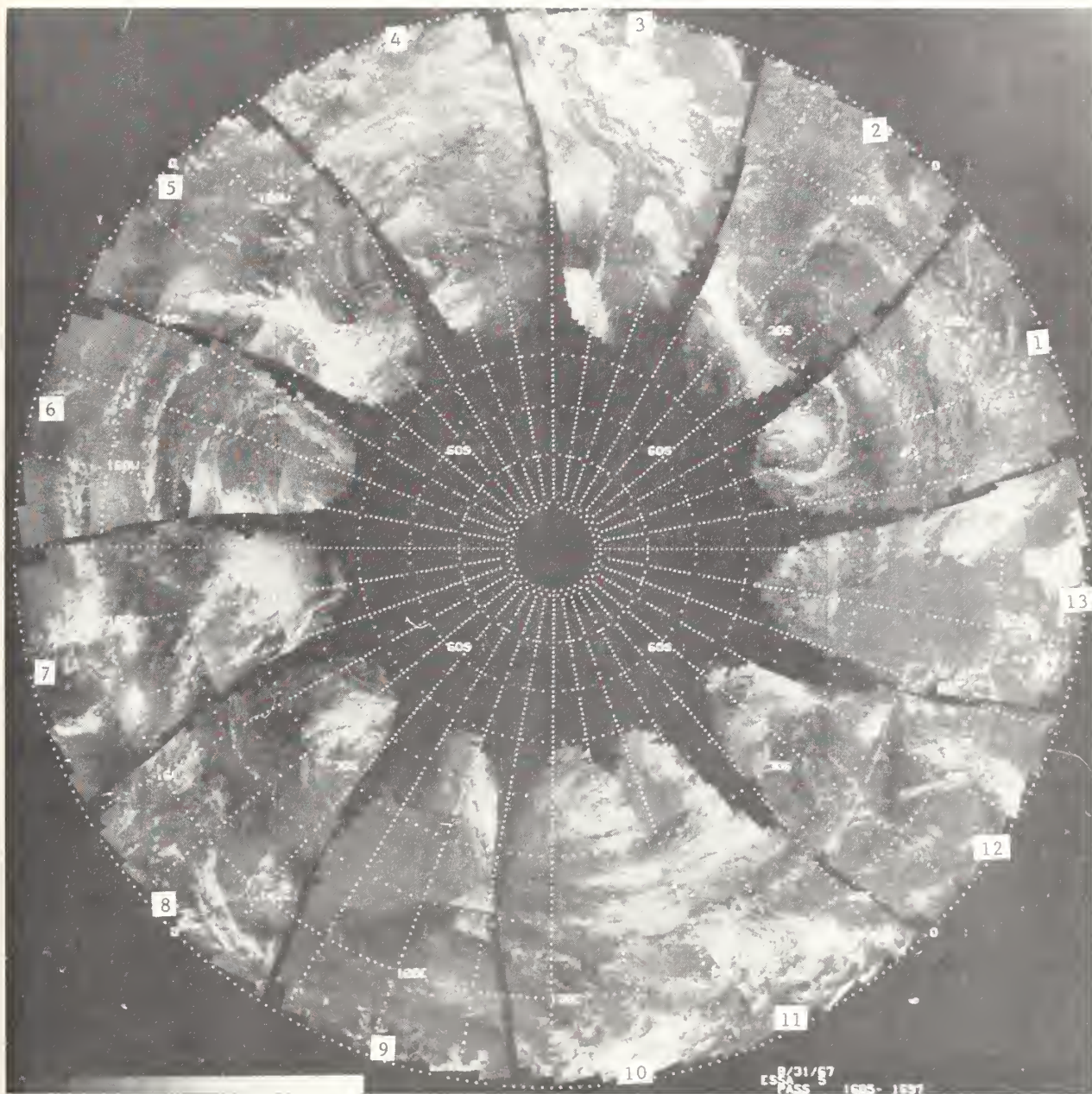


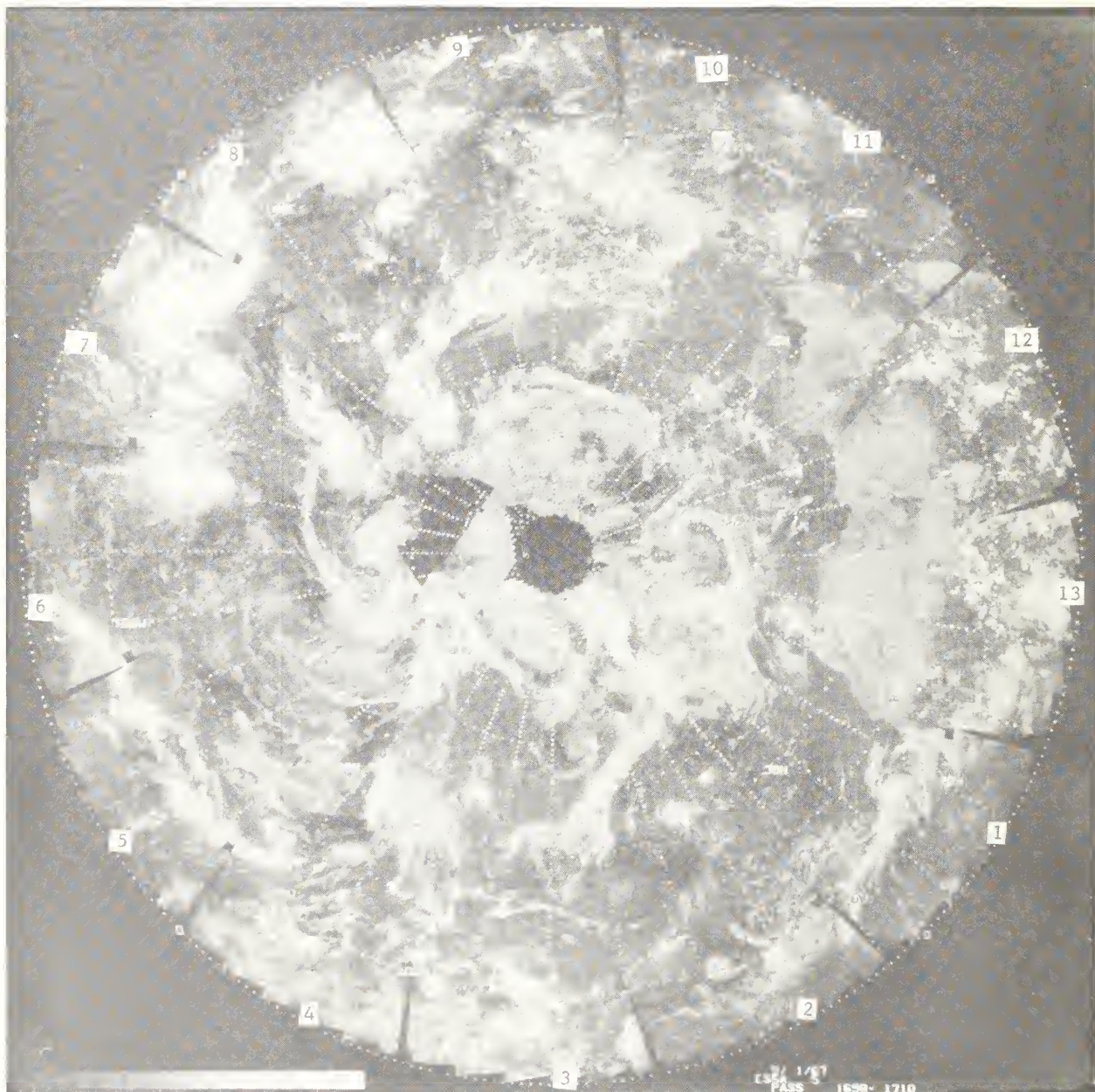


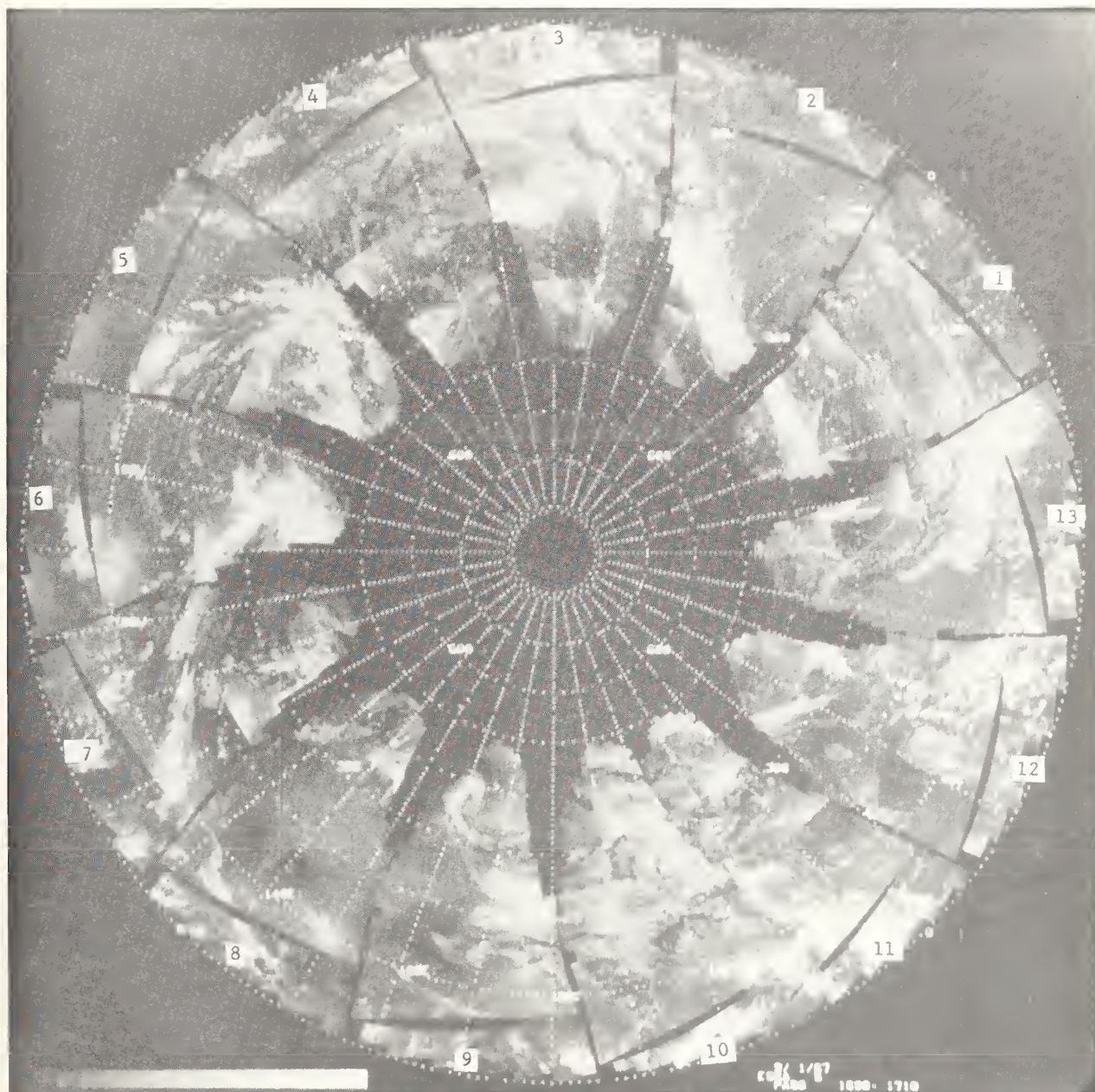


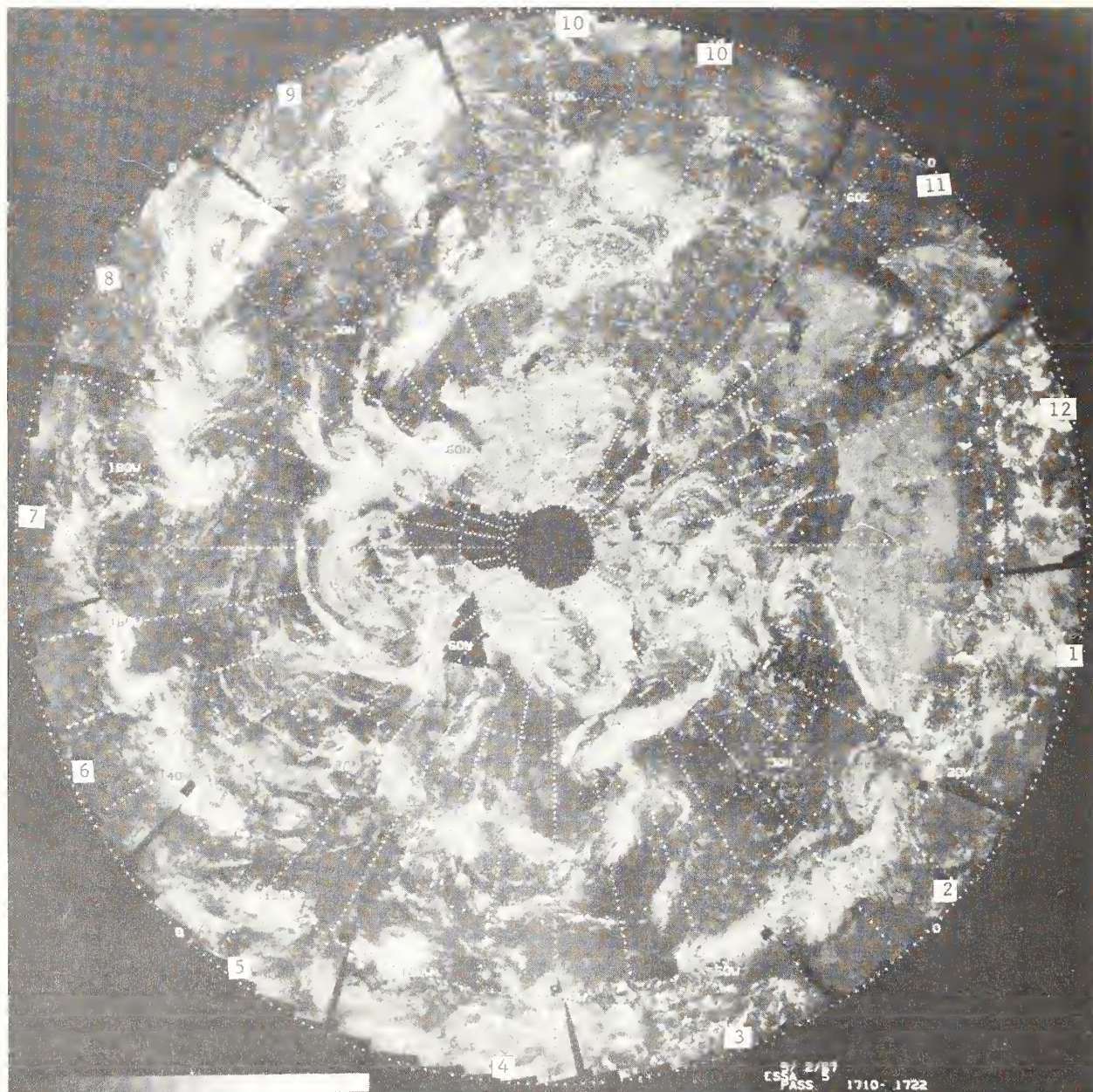


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ESSA 5
PASS 1685-1697



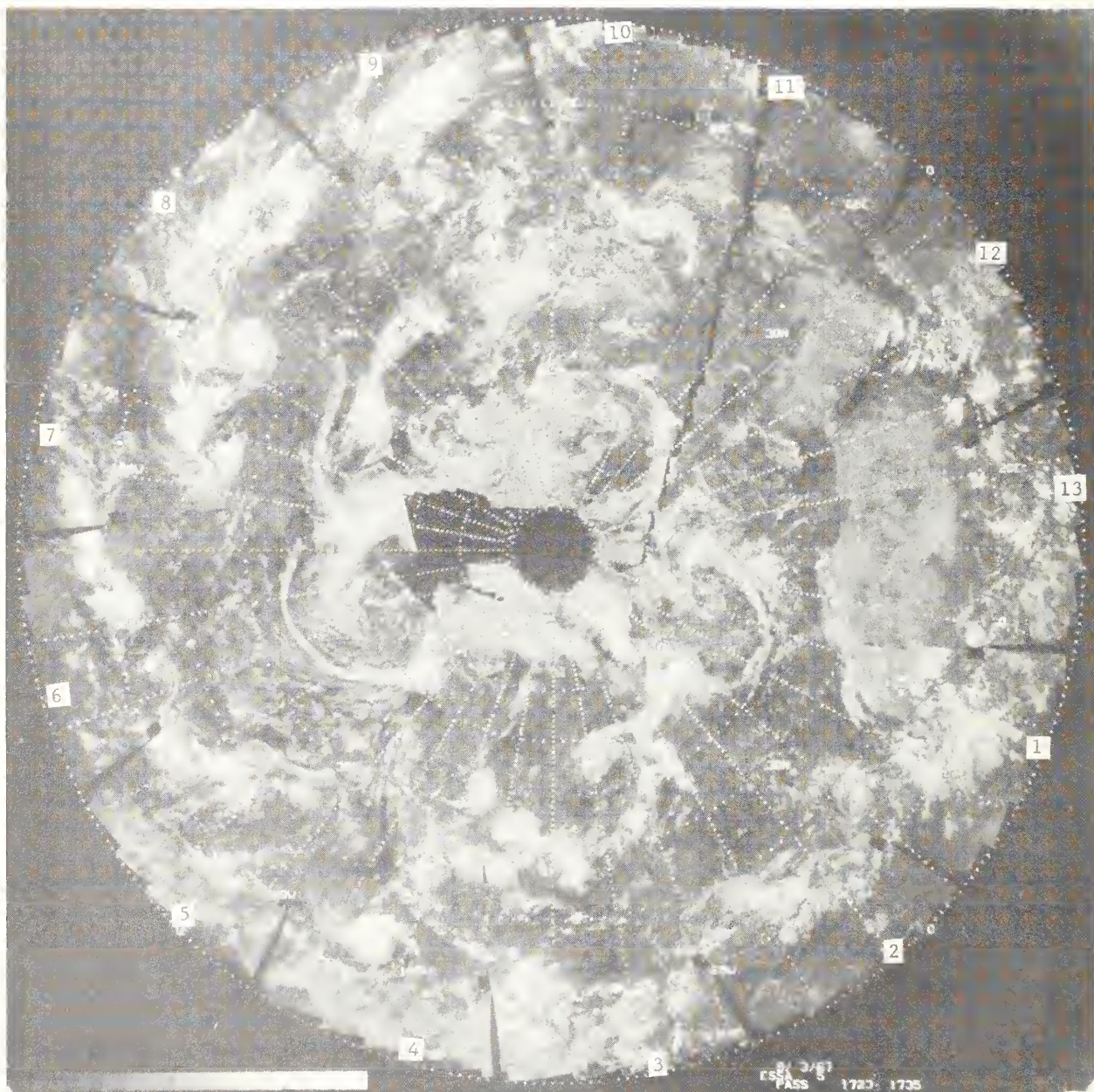




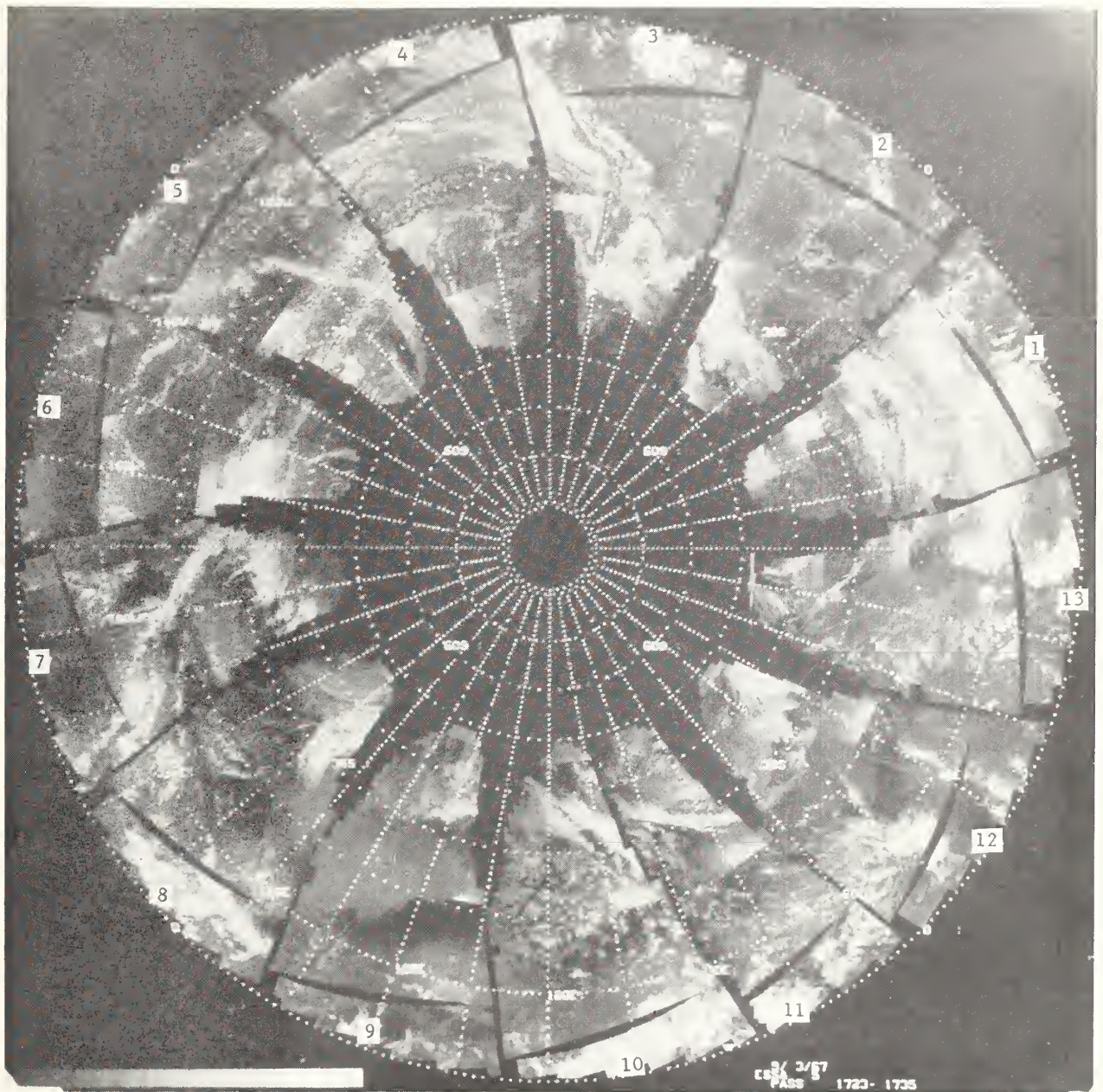


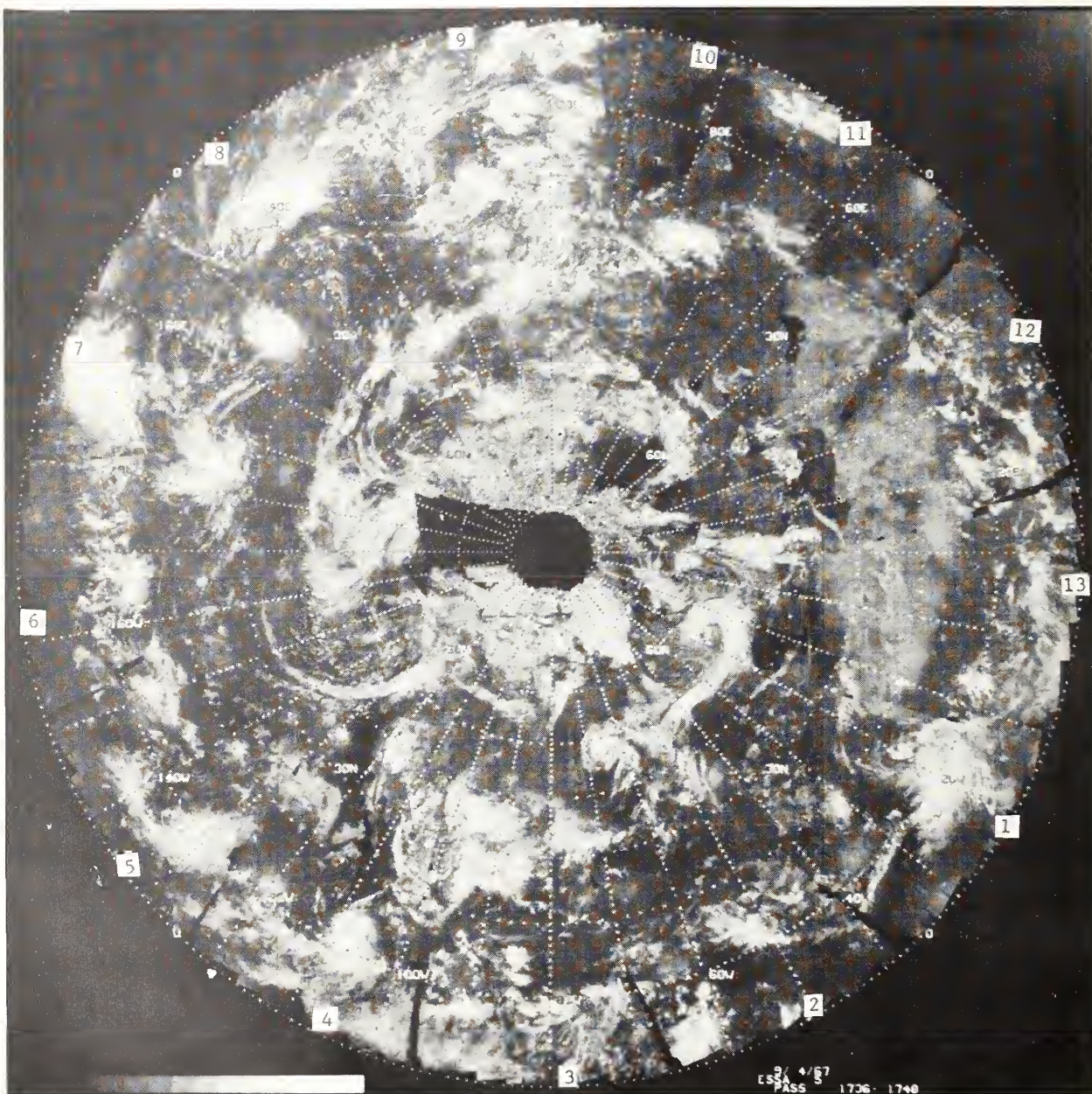


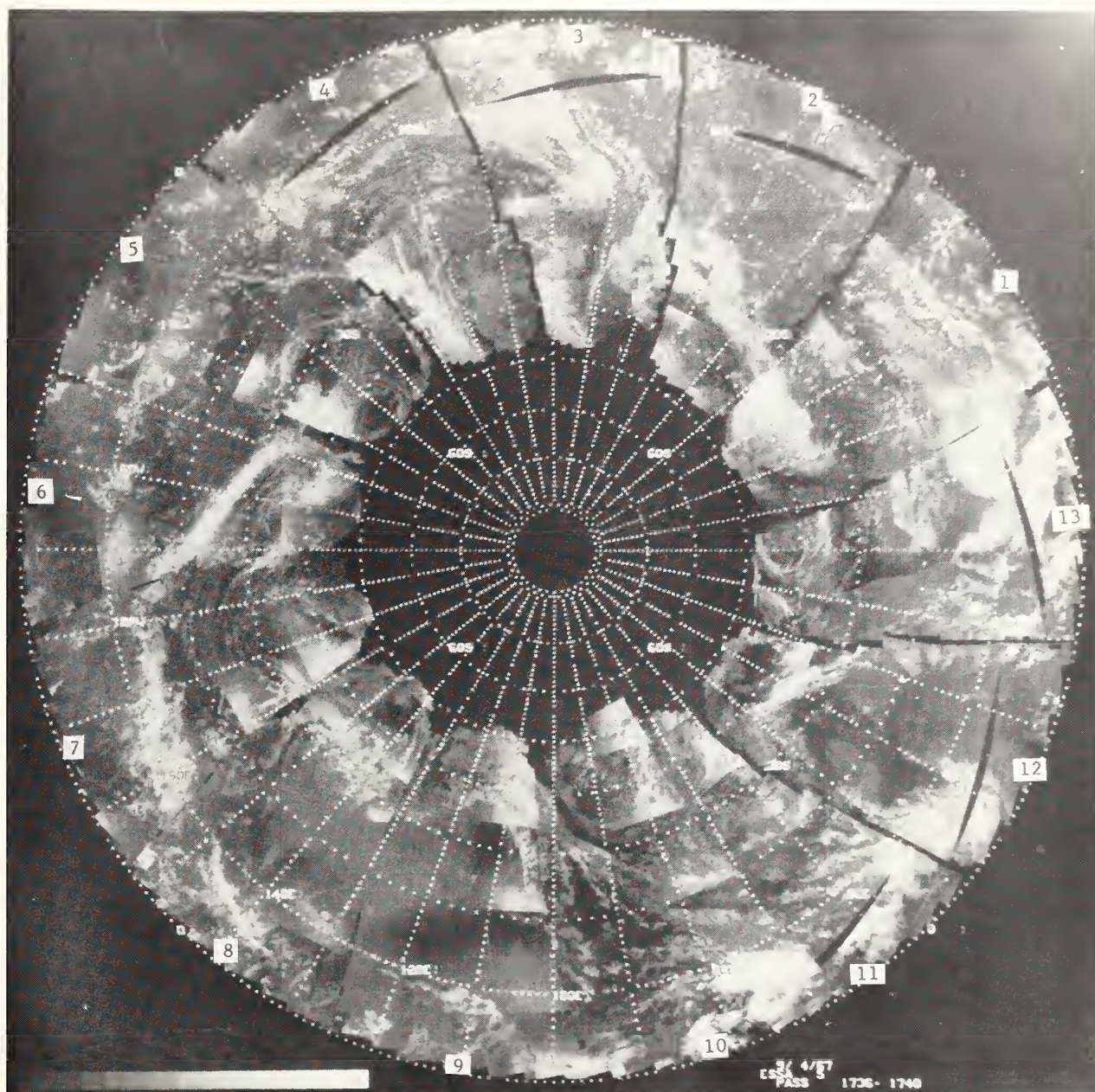
3/ 2/57
ESSA
PASS 5 1718- 1722

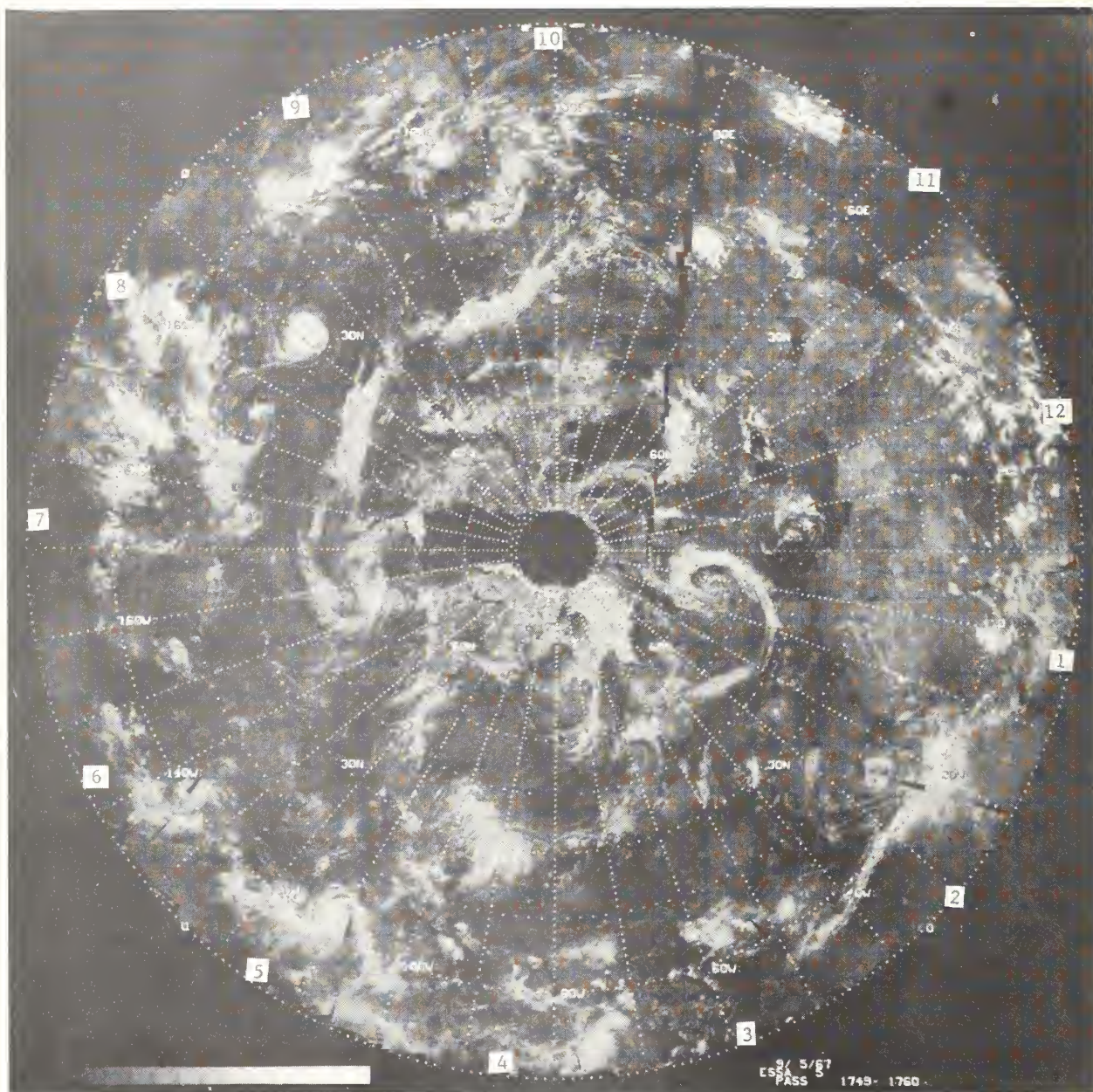


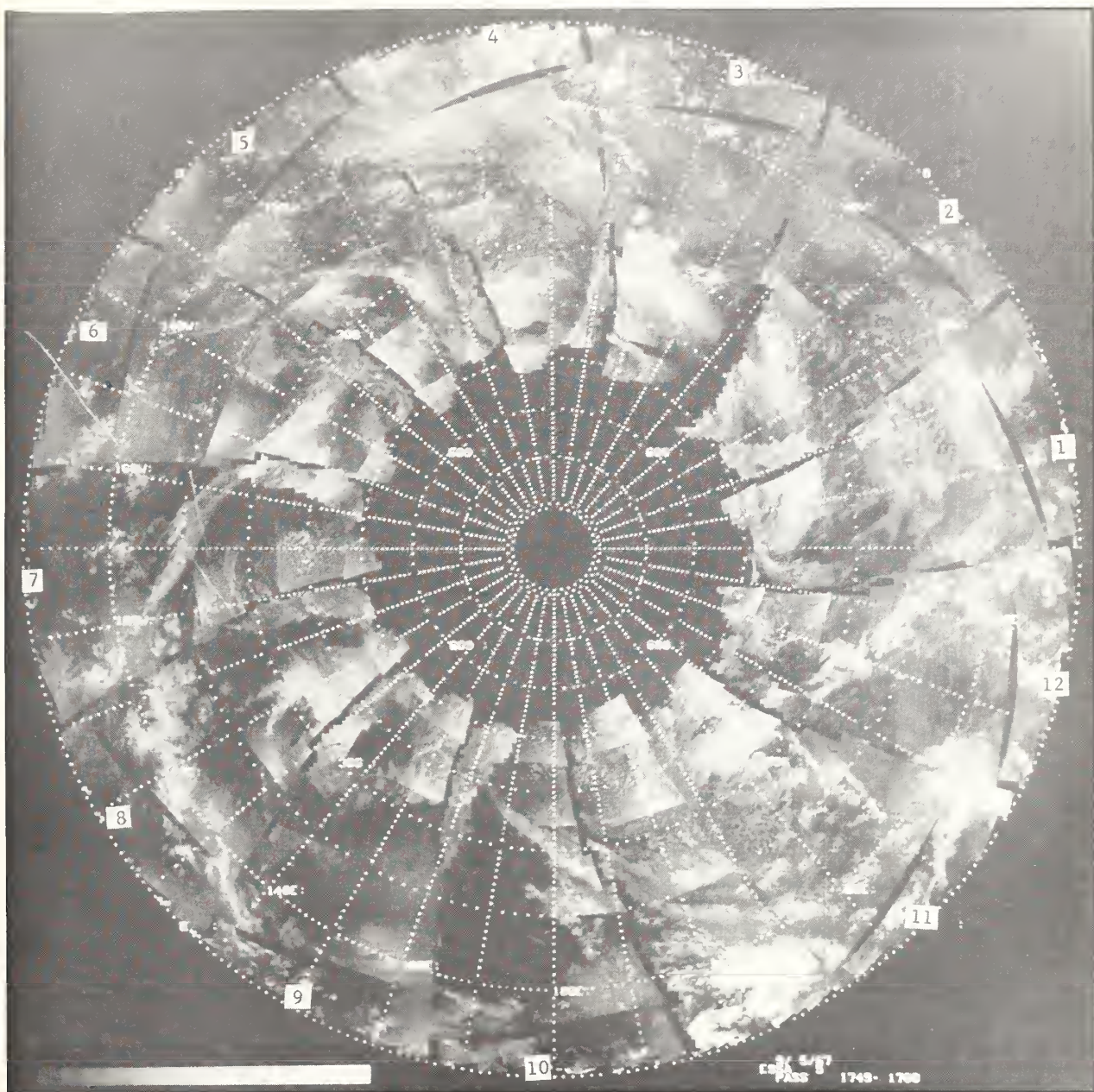
8/3/51
PASS 5 1723 1735

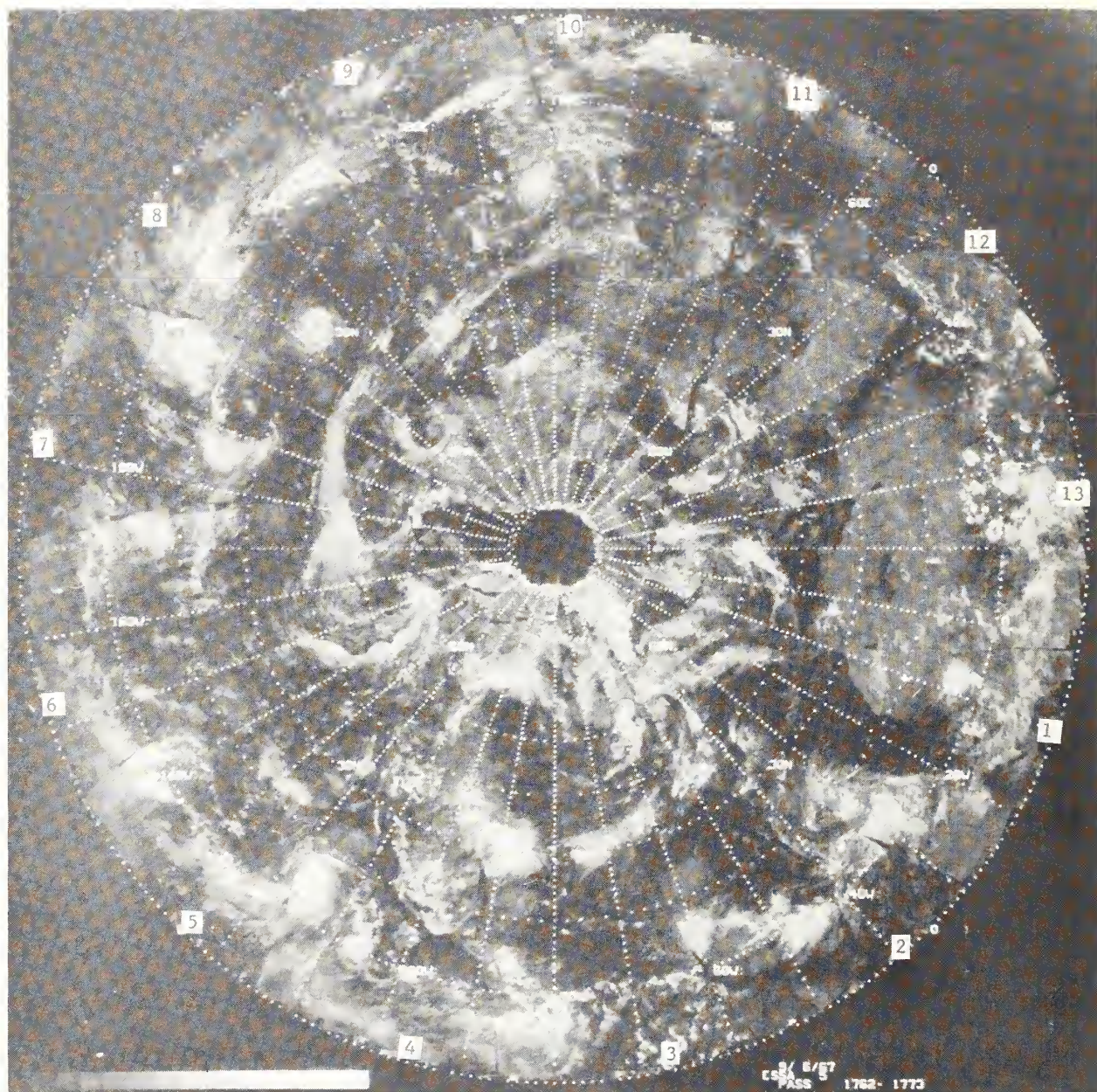


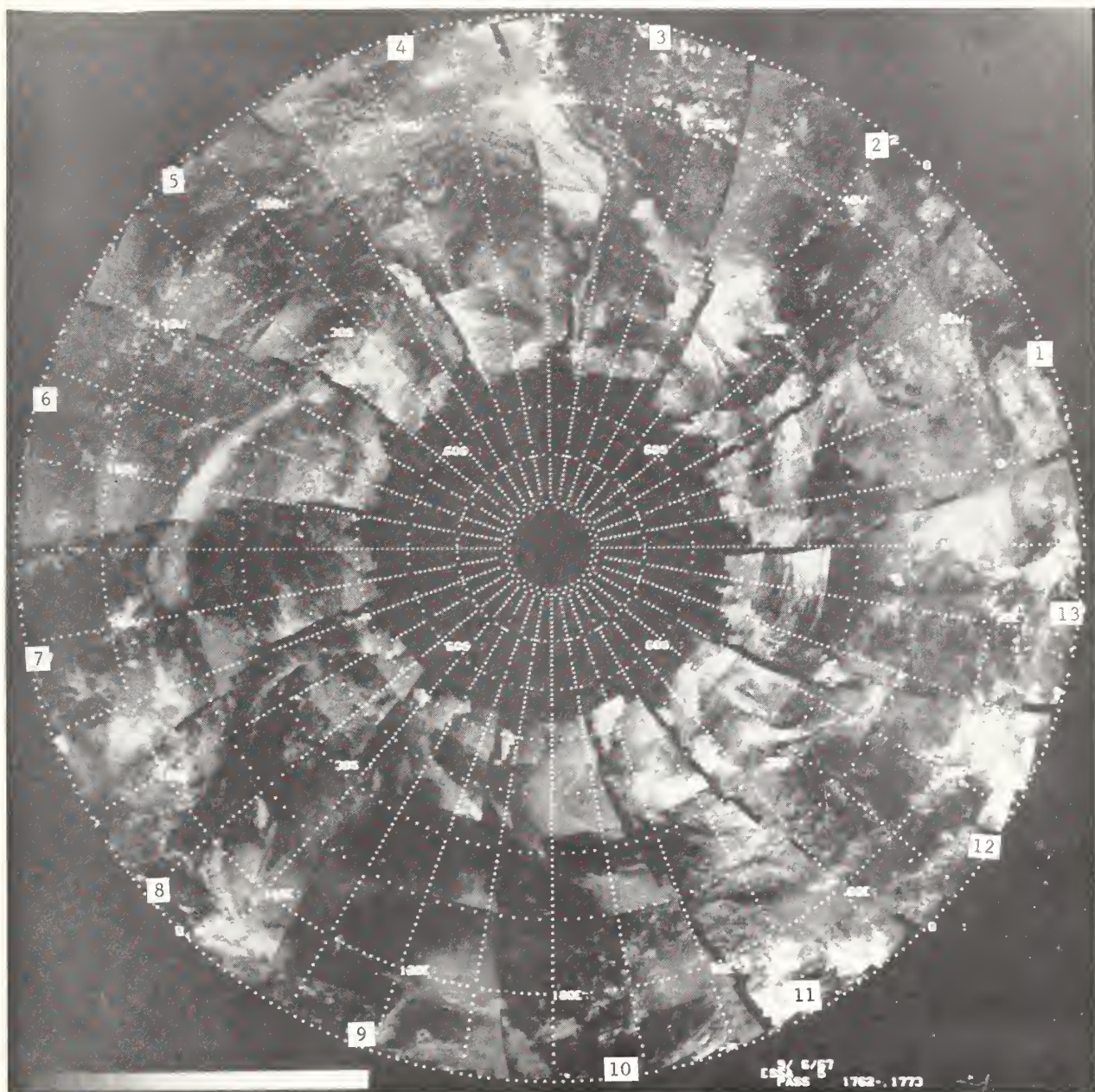


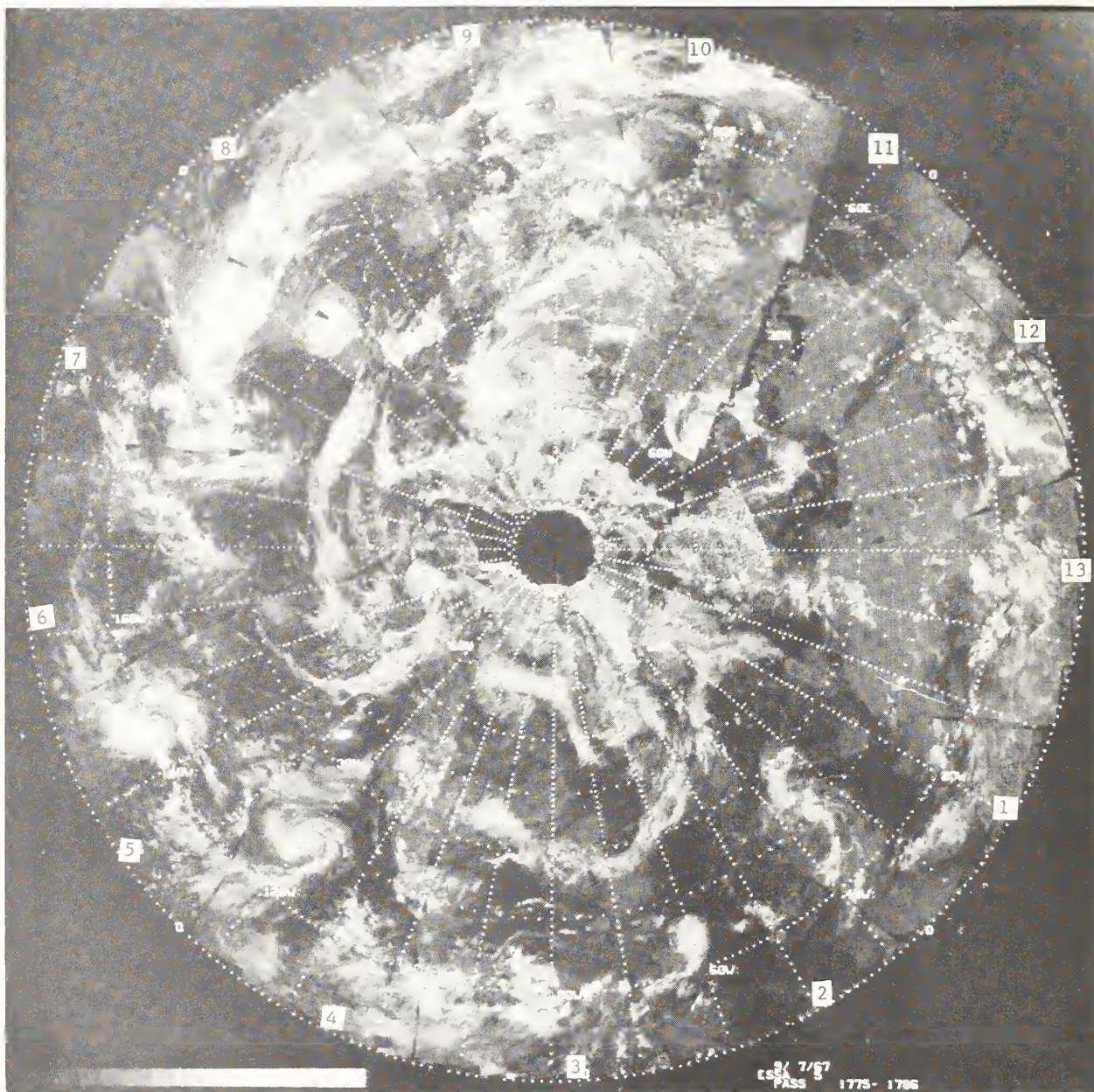


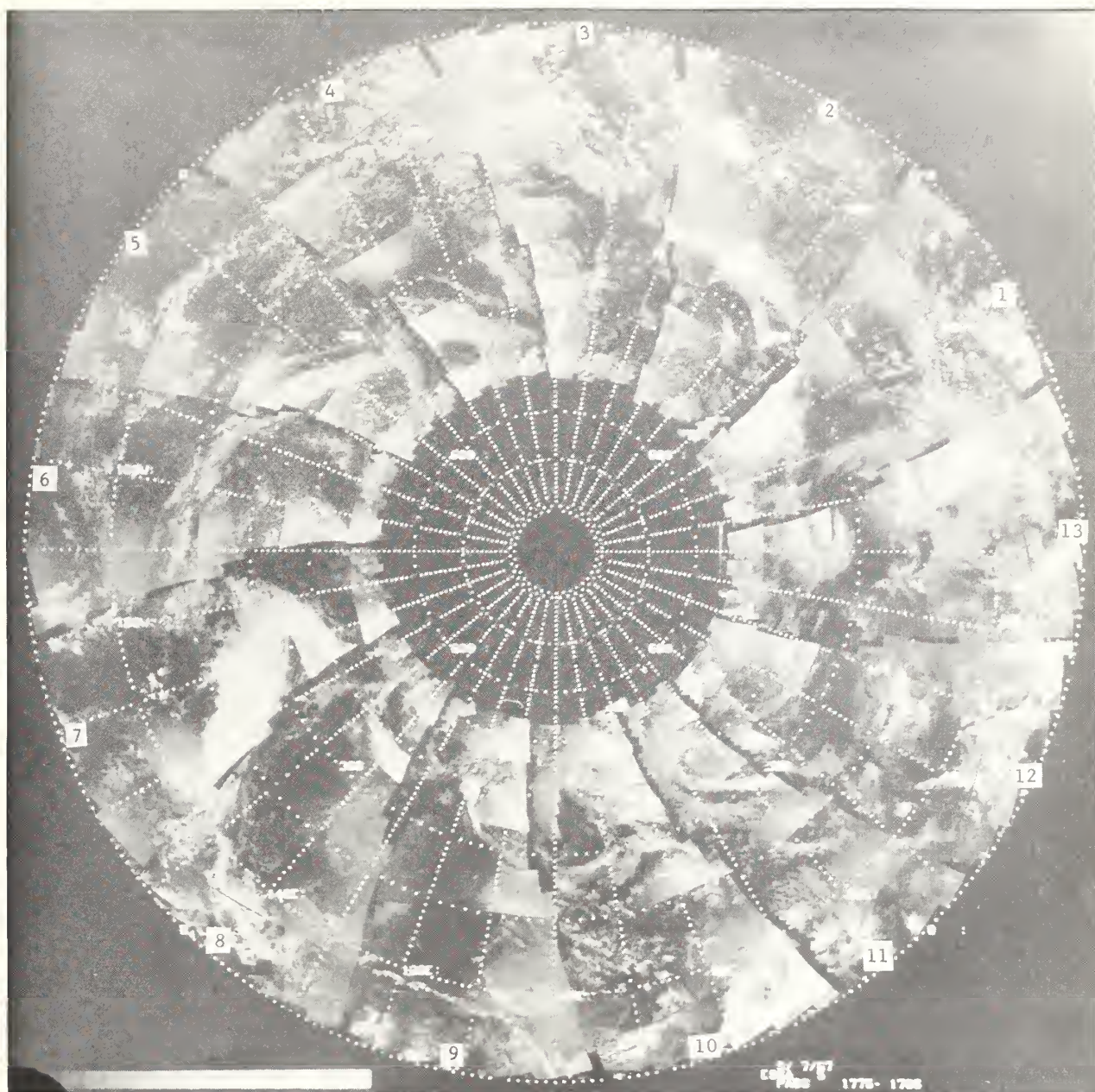


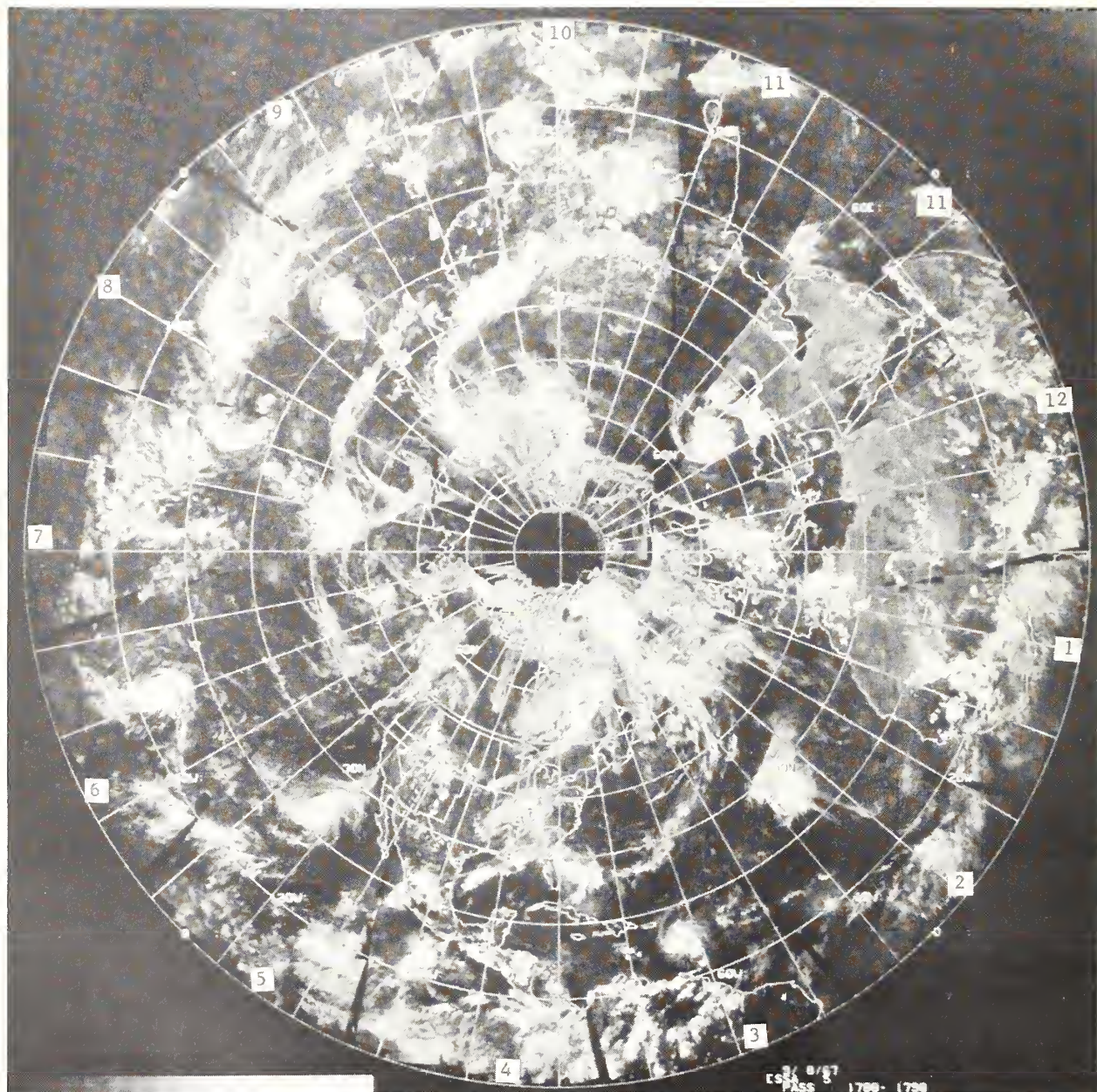


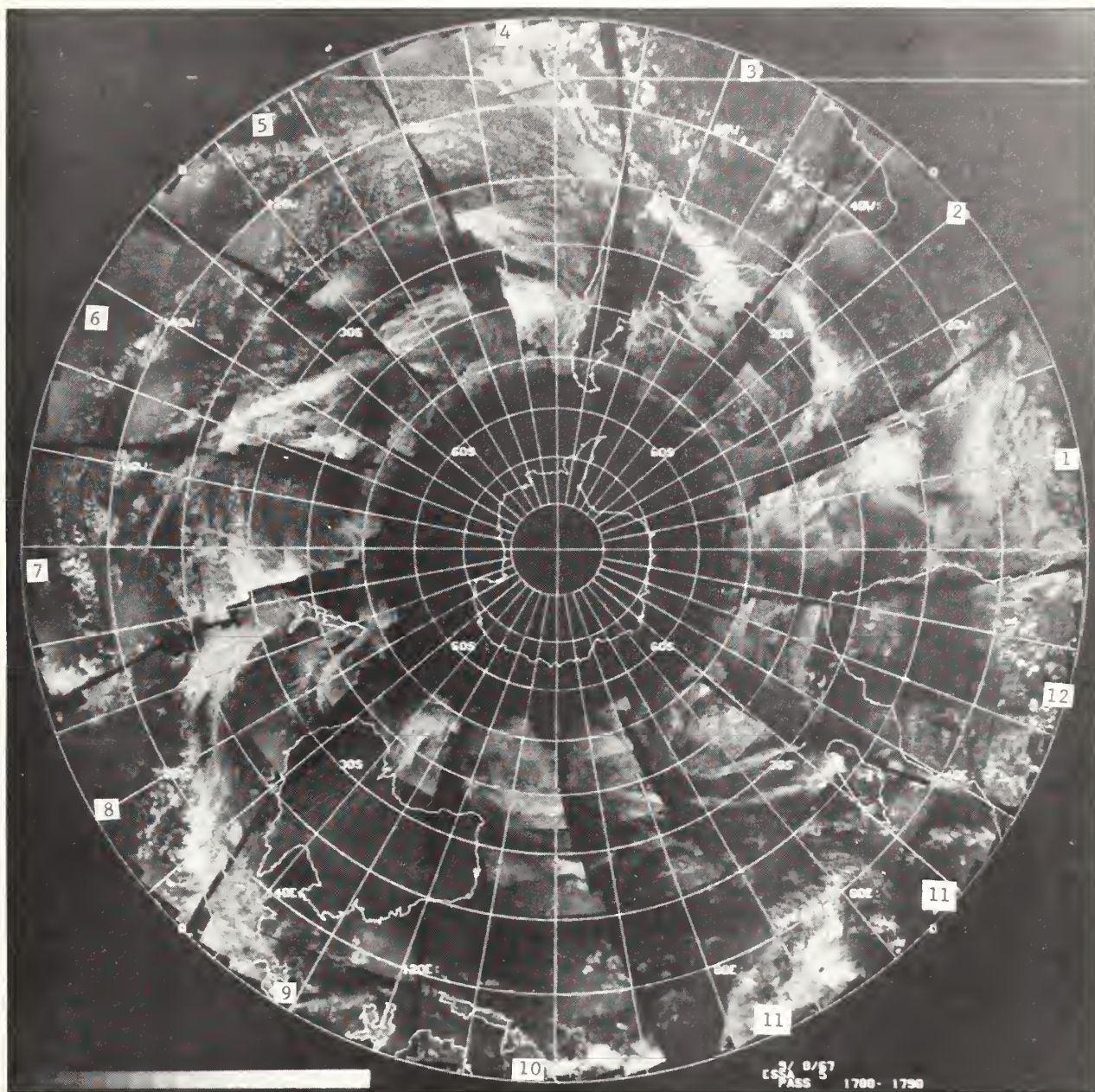


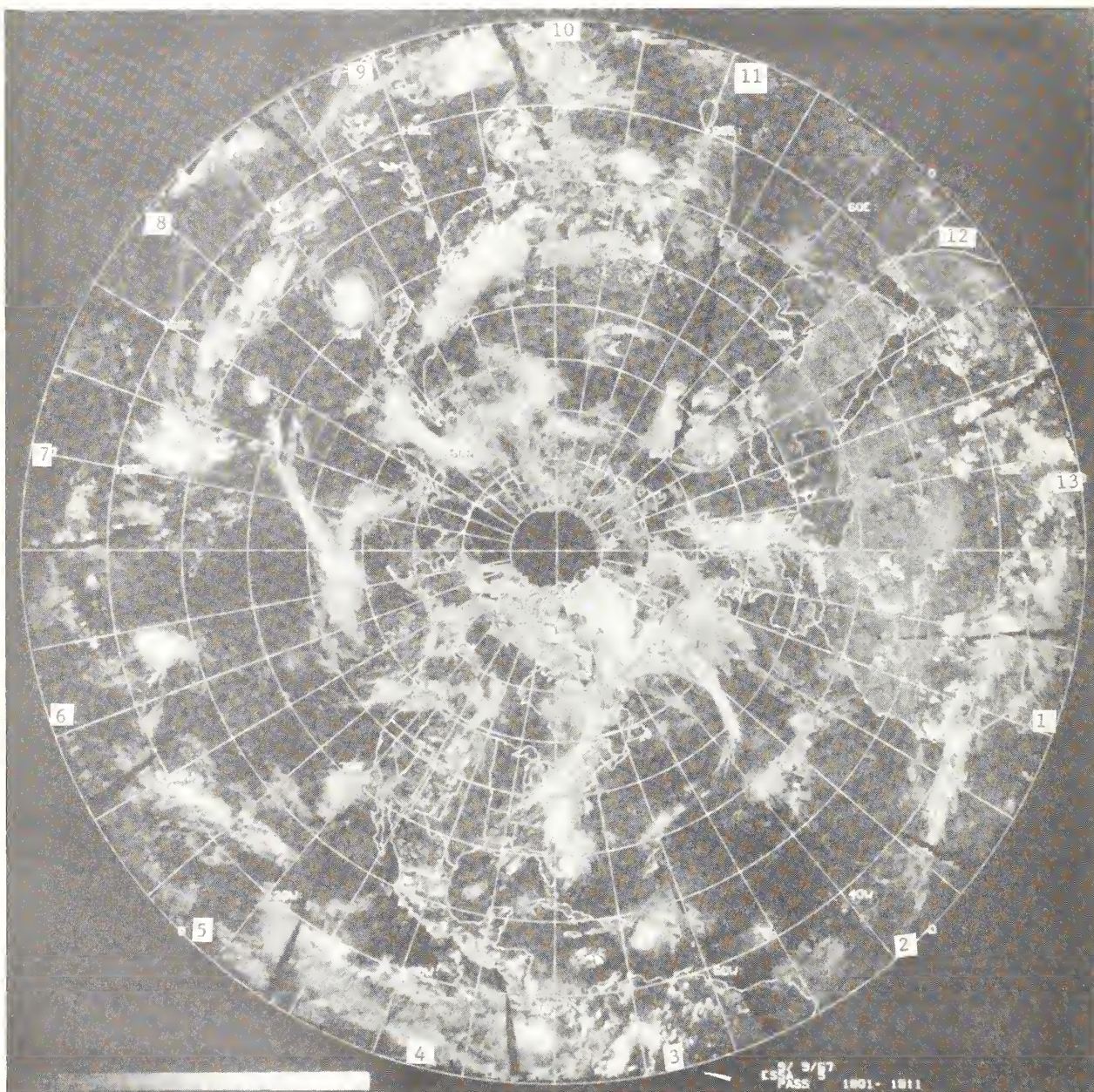


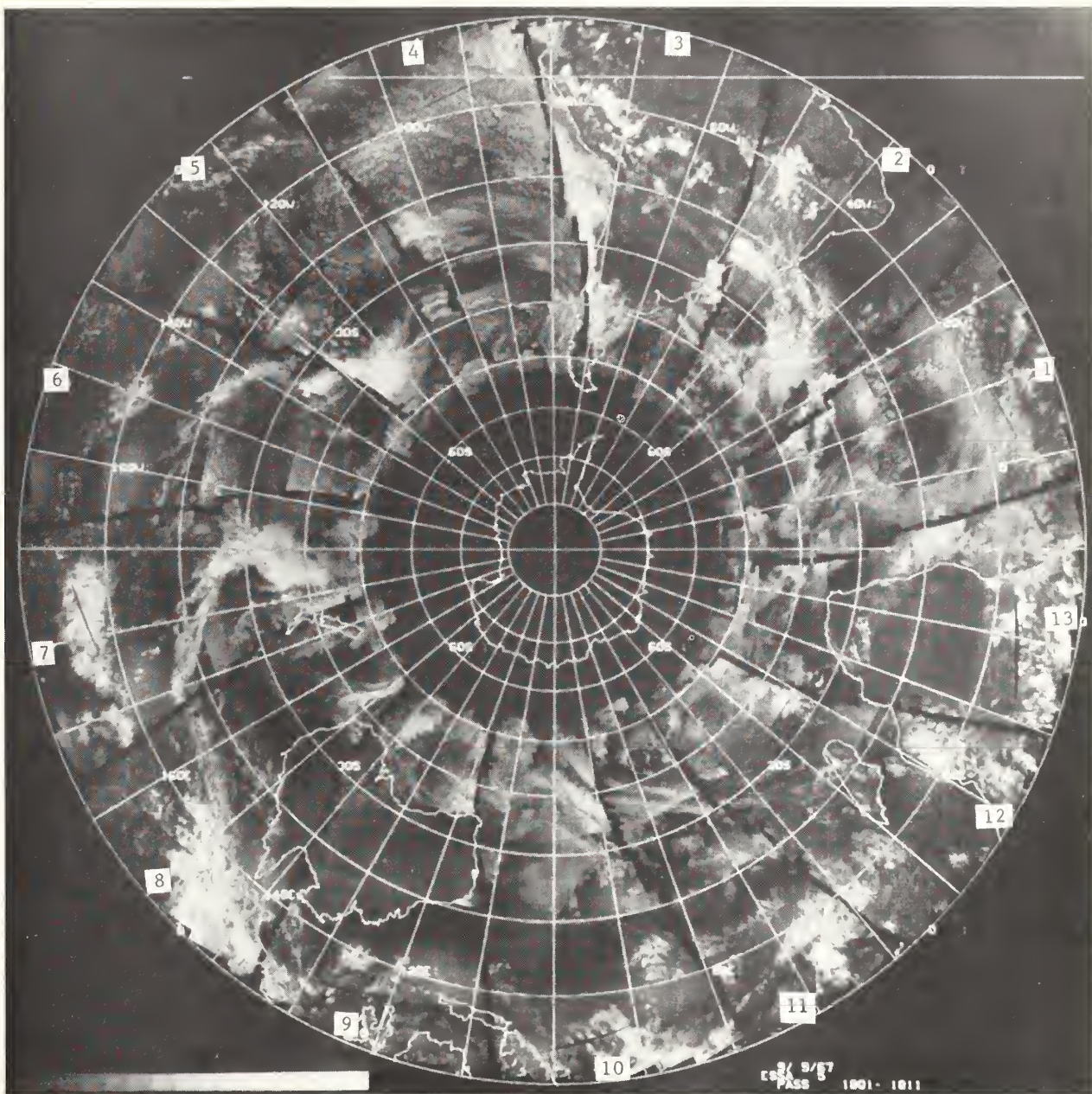


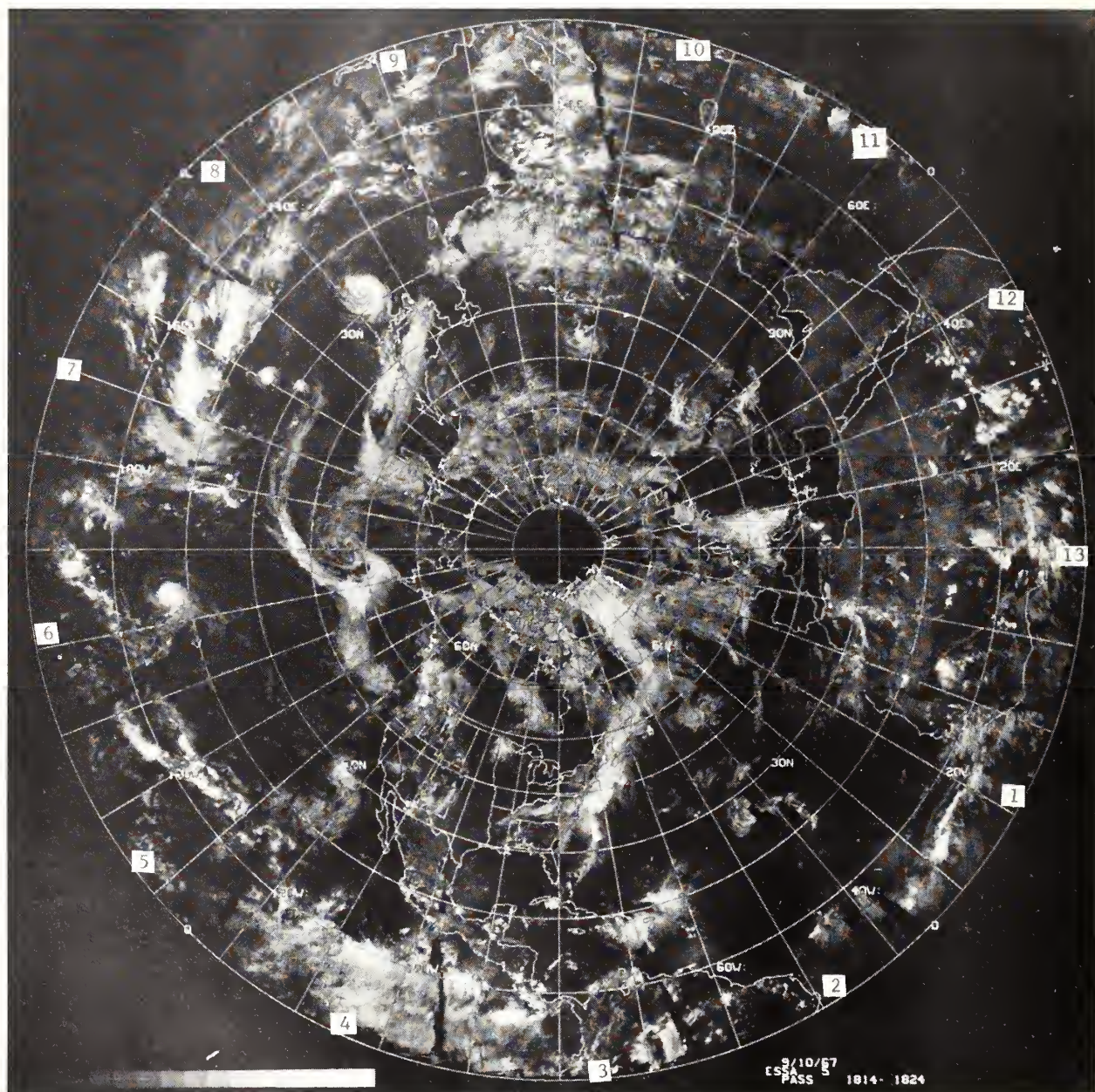


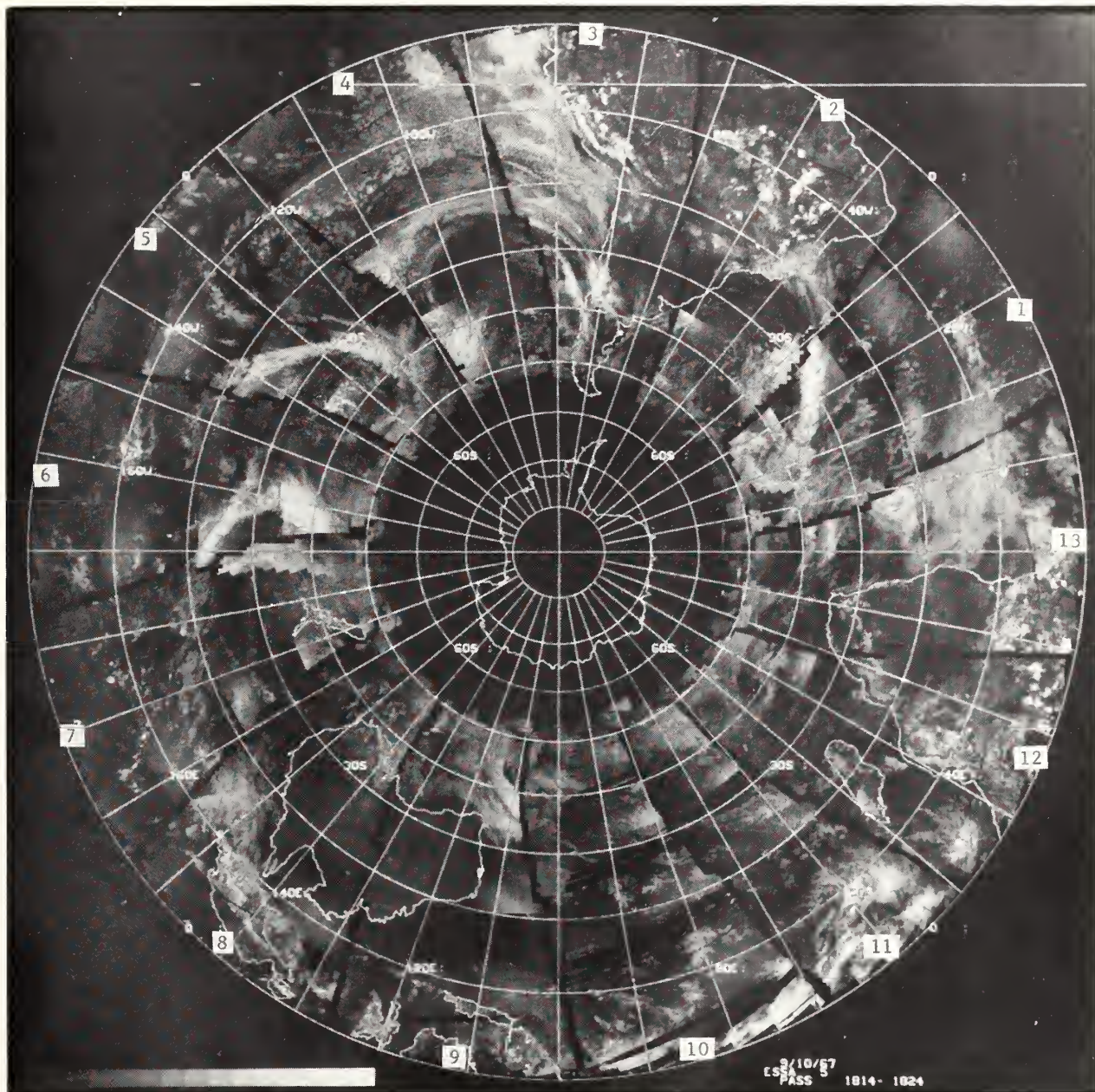


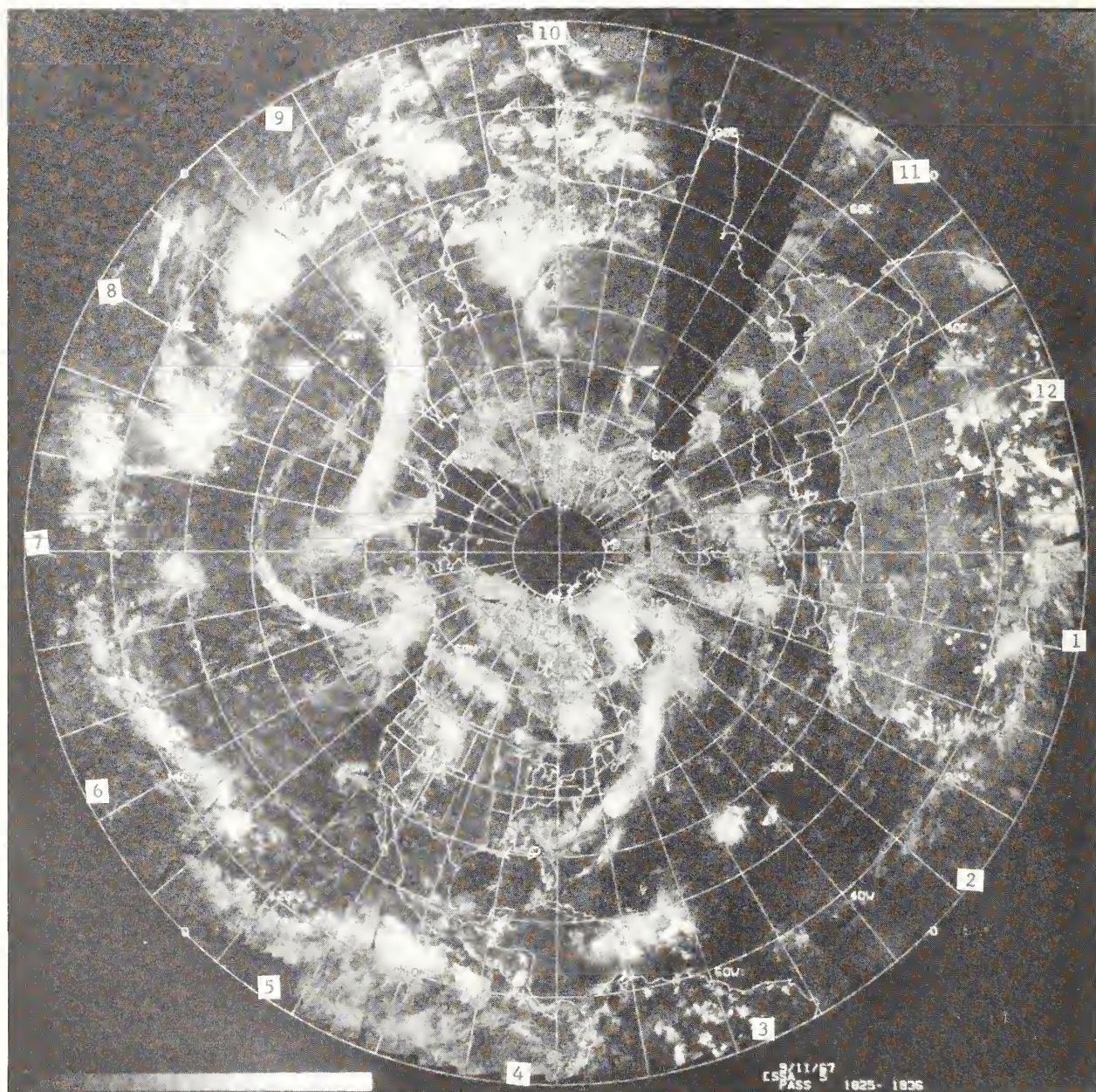


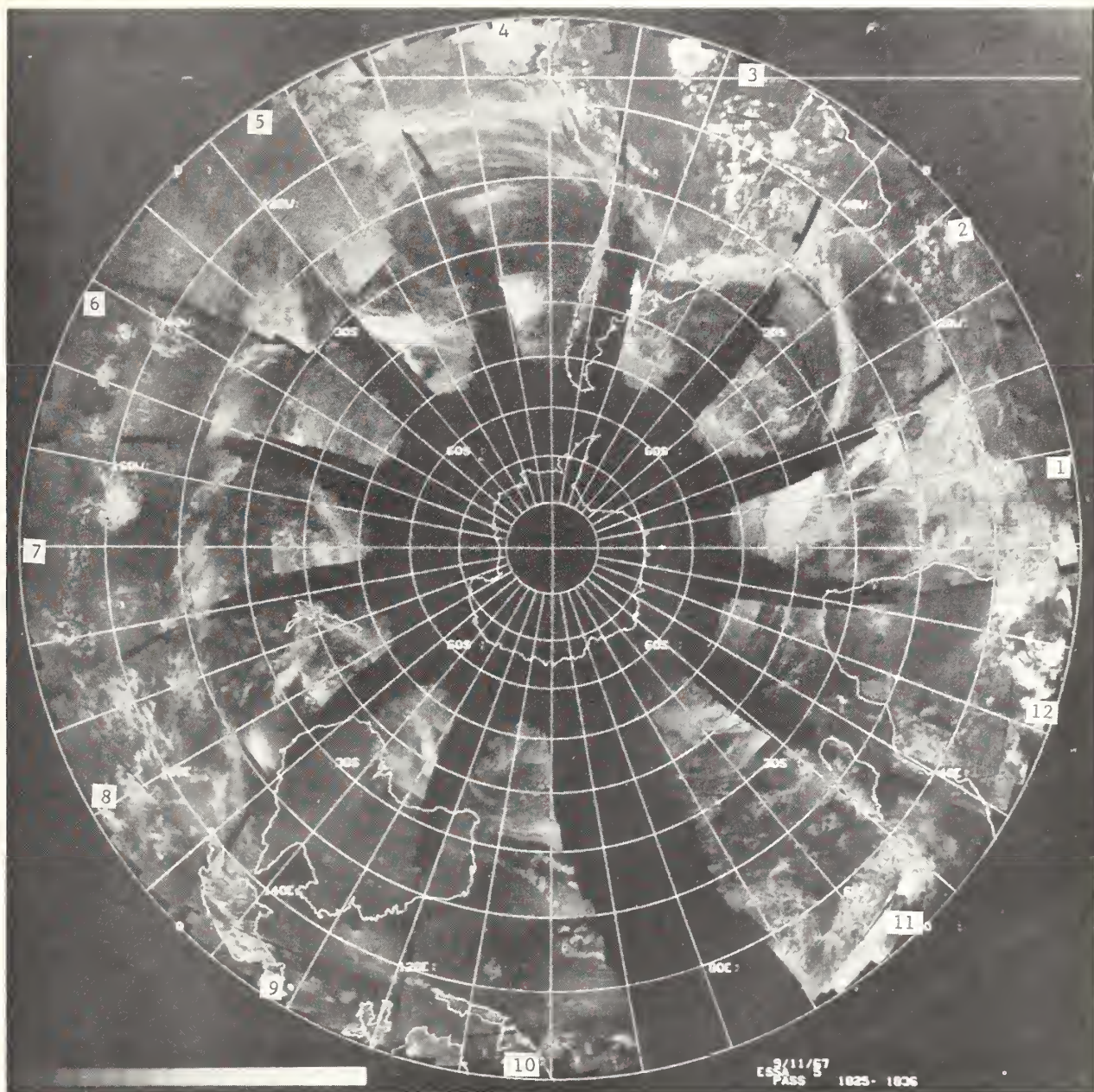


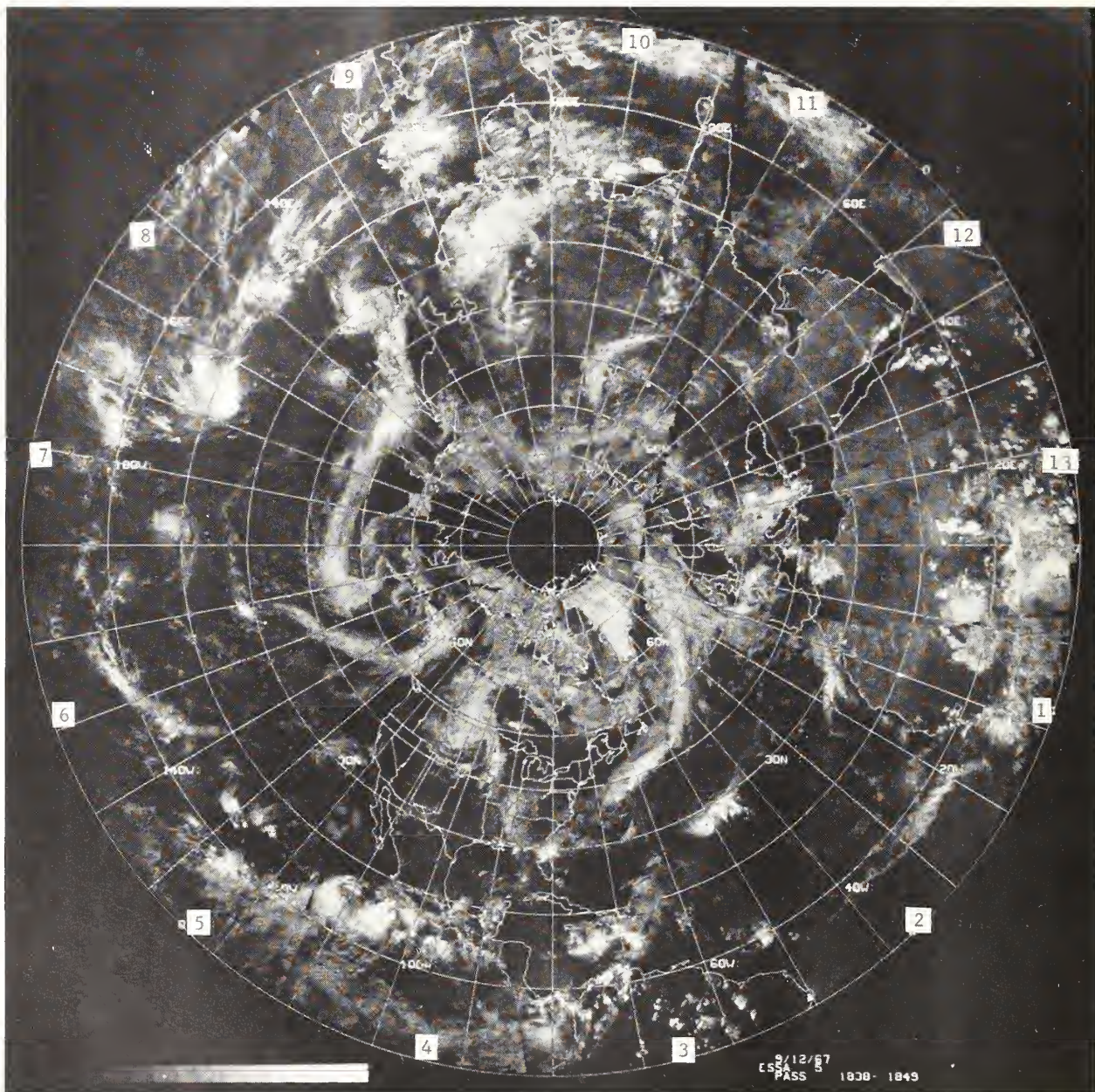


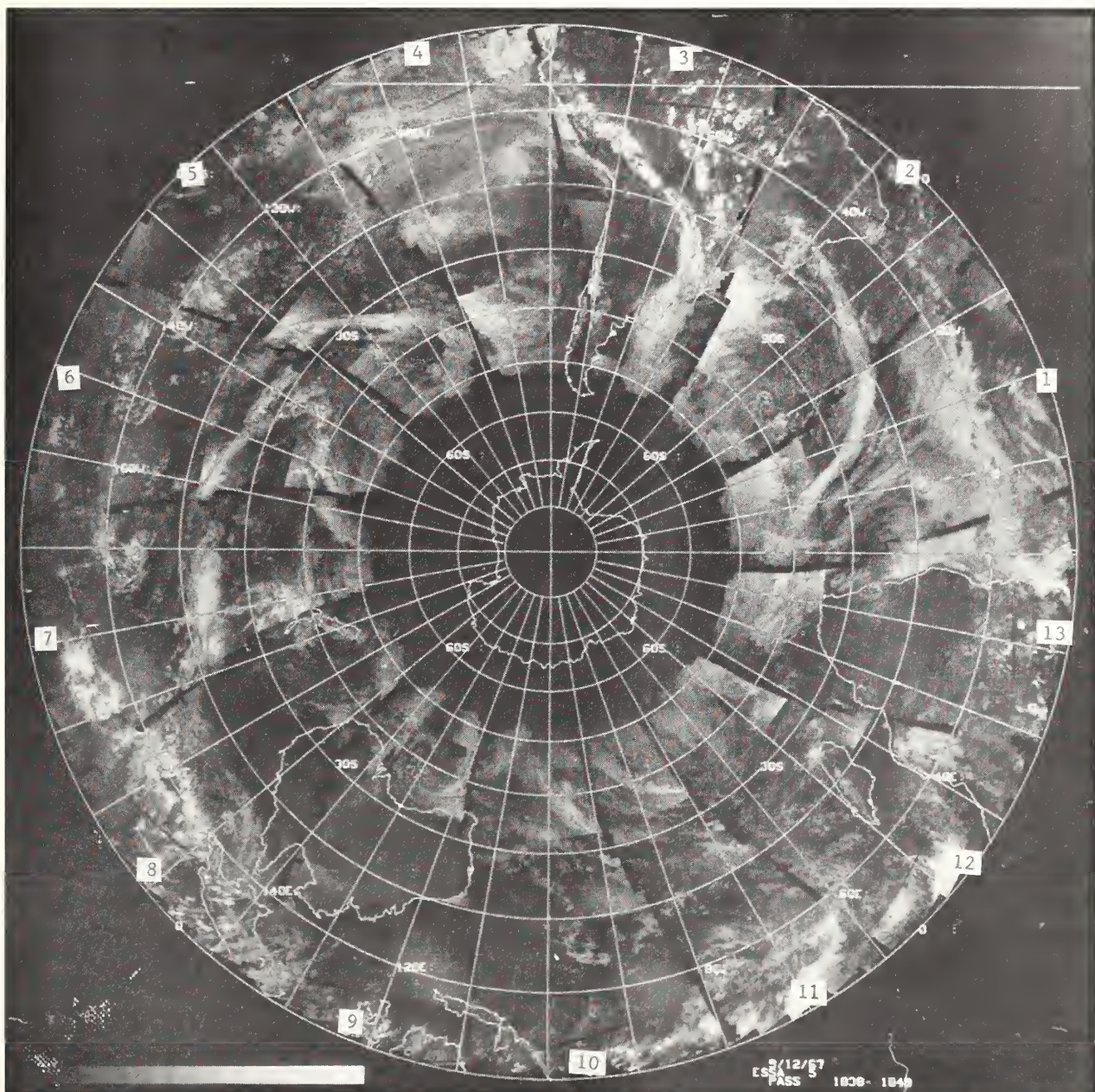




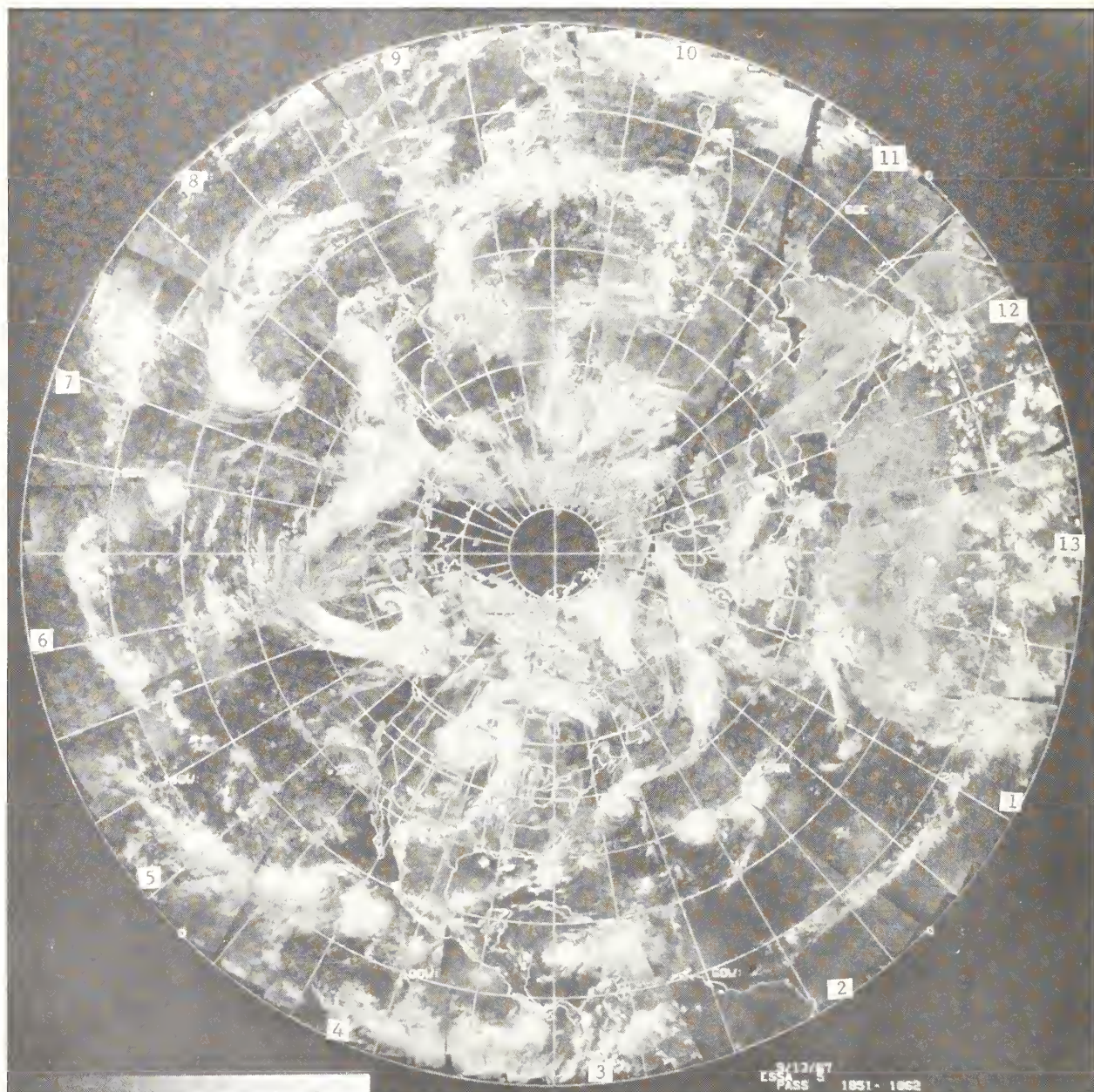


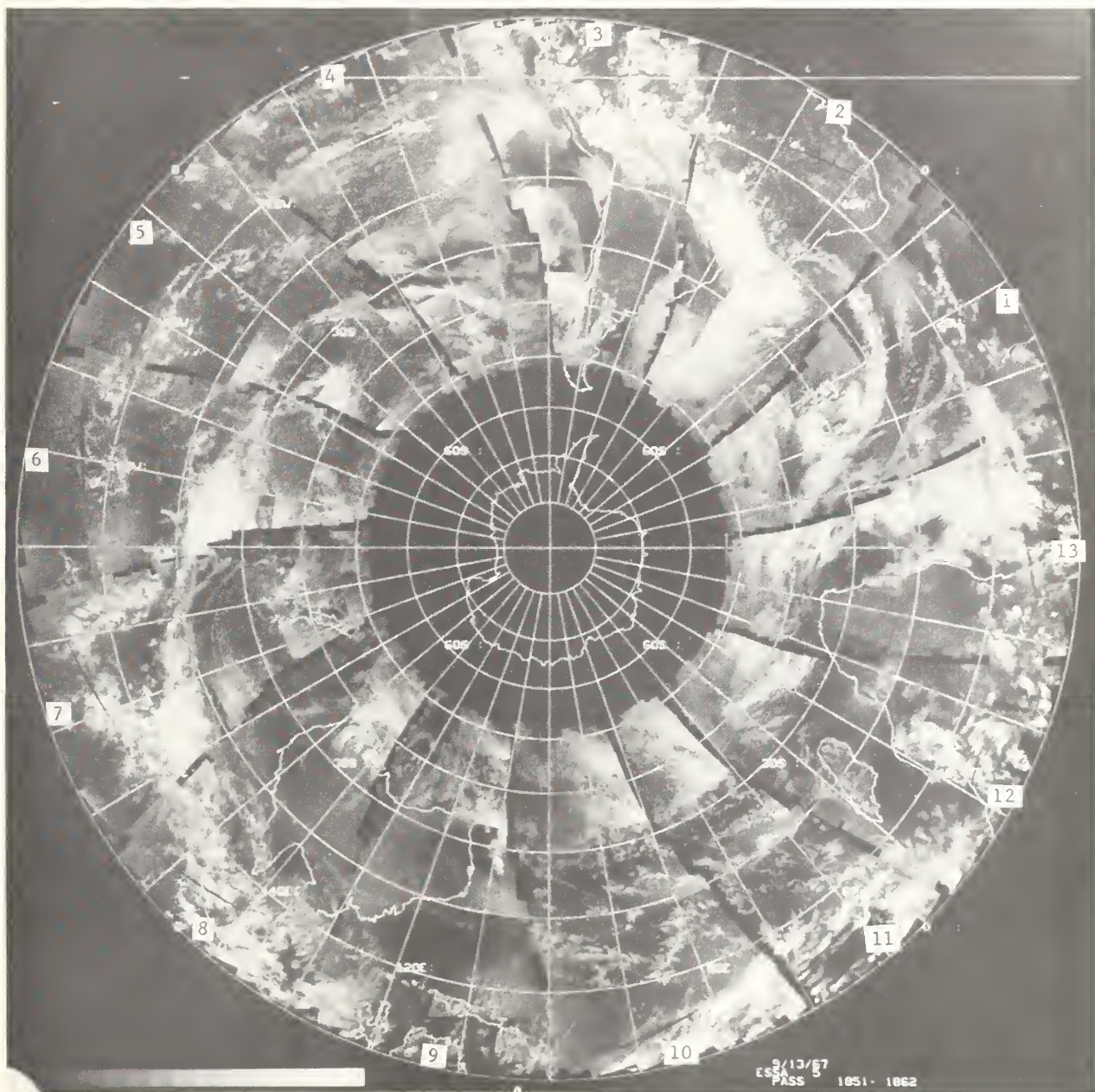


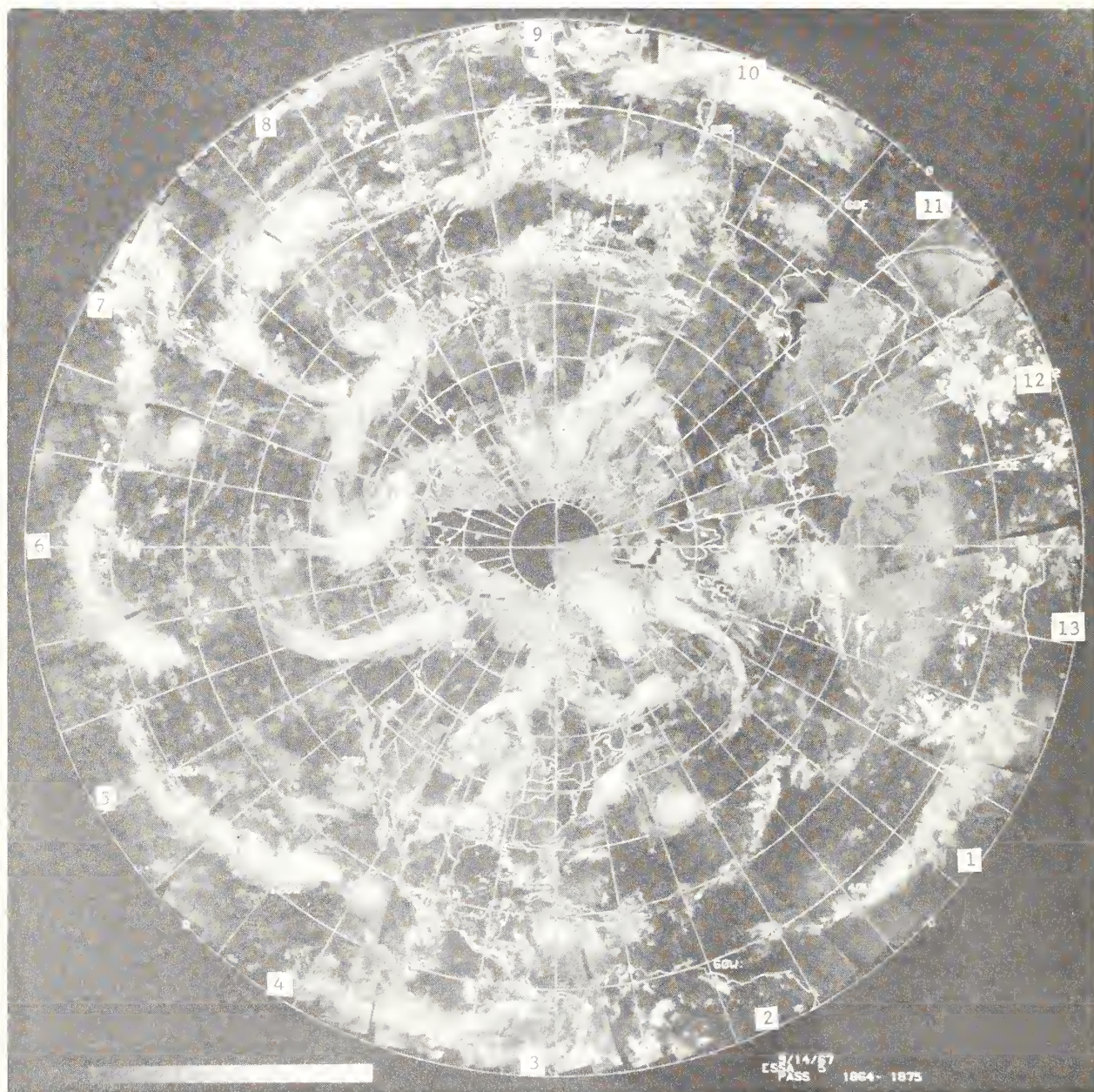


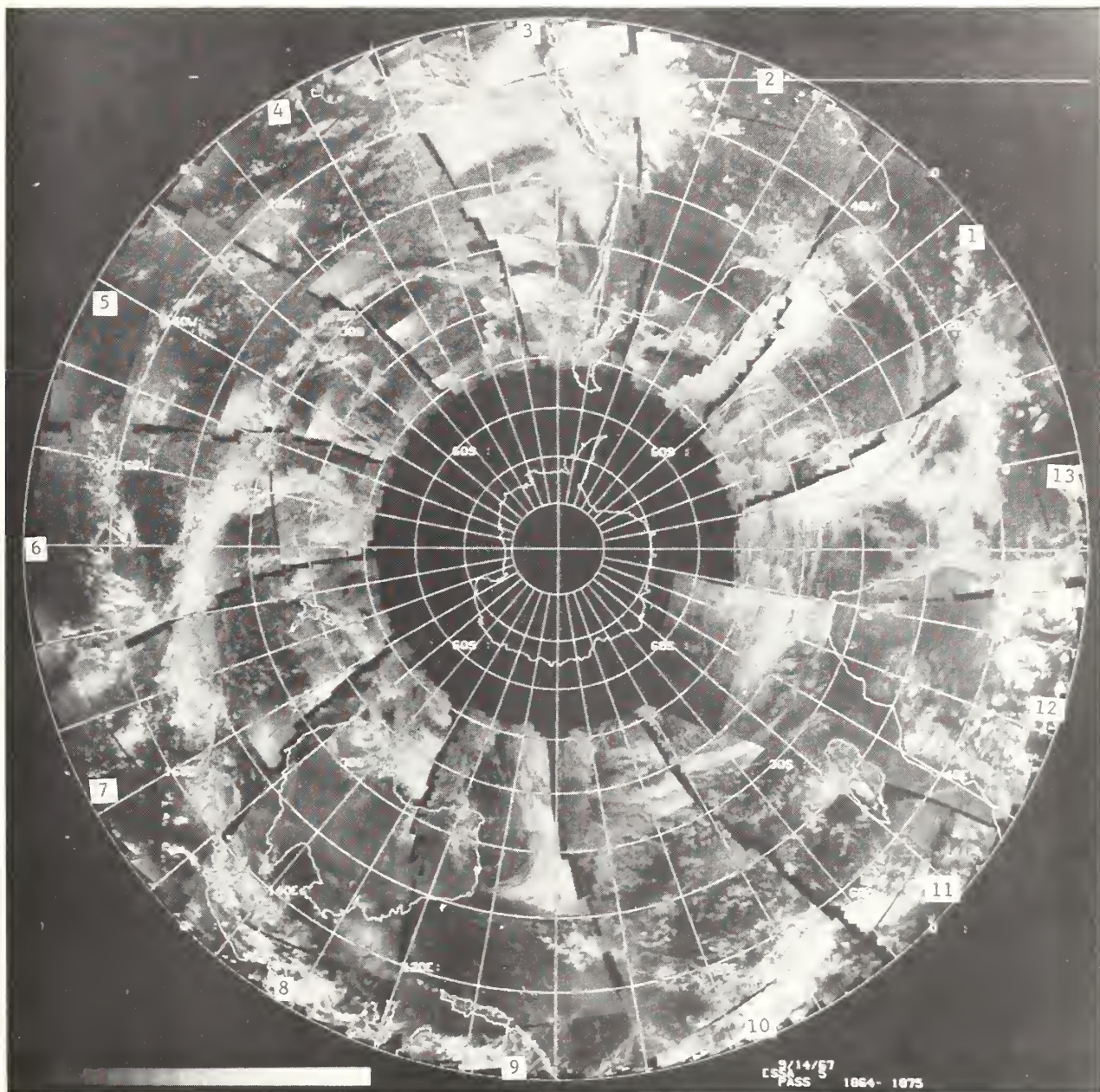


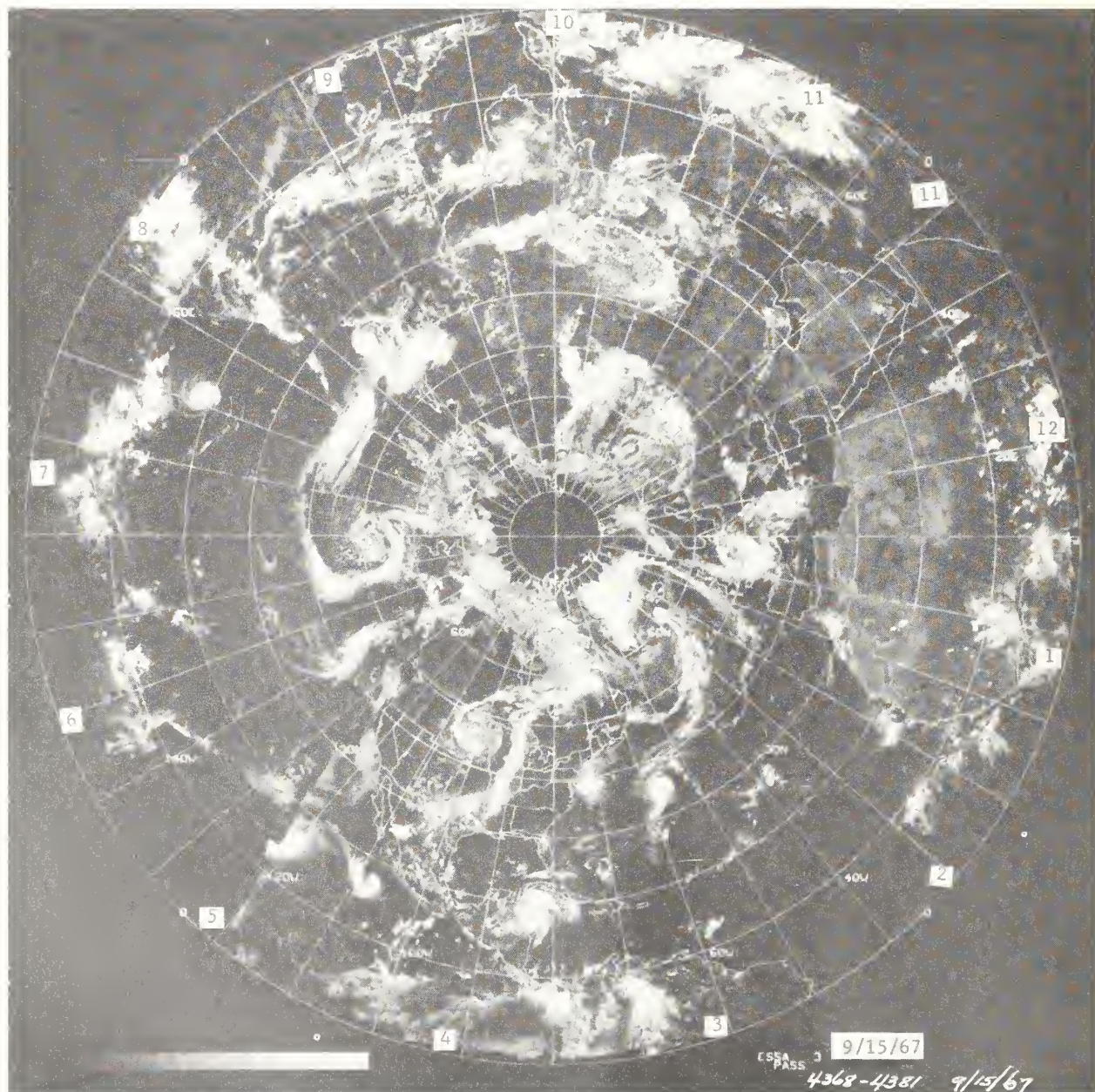
2/12/57
ESSA
PASS 1000- 1040

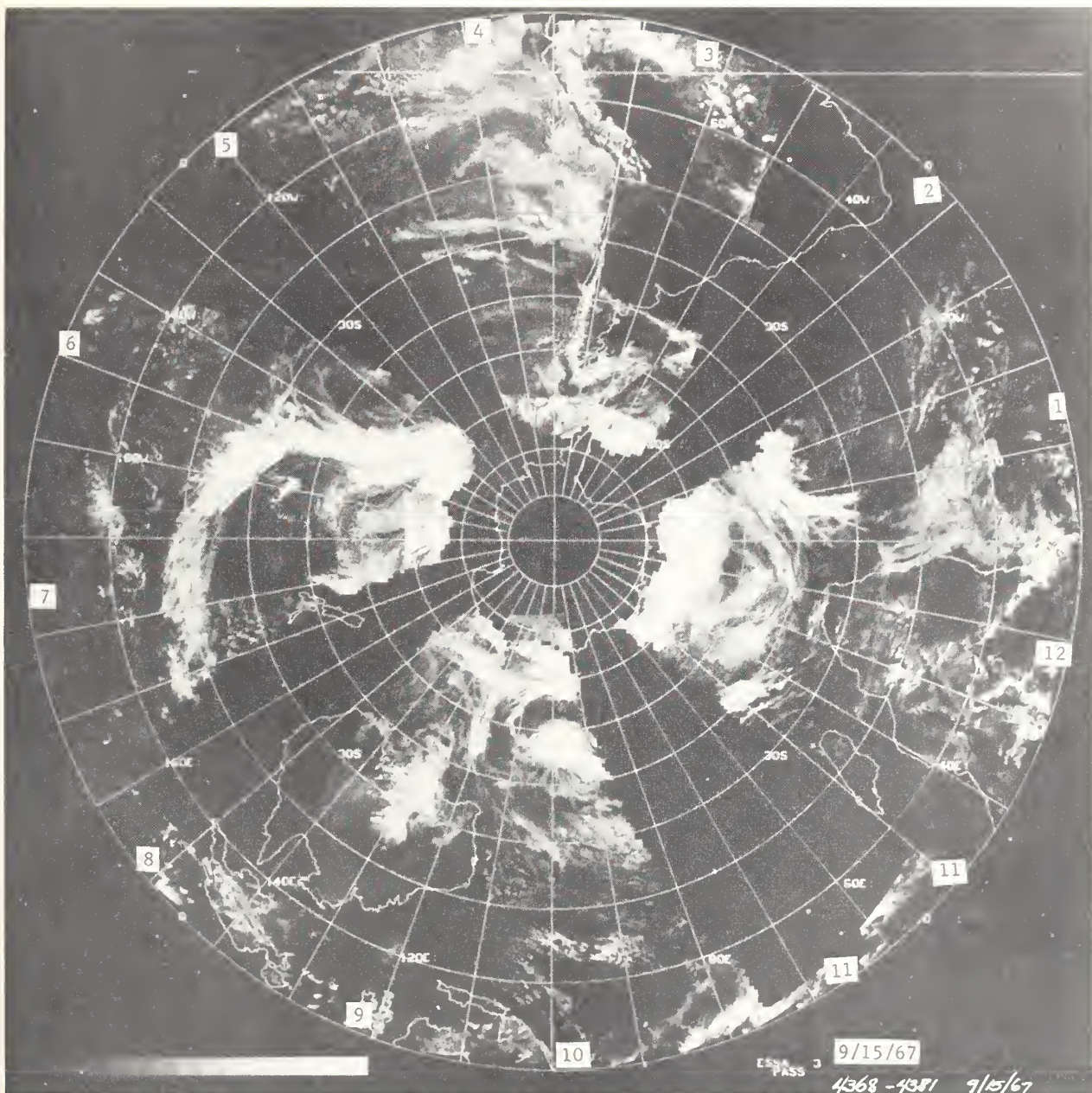


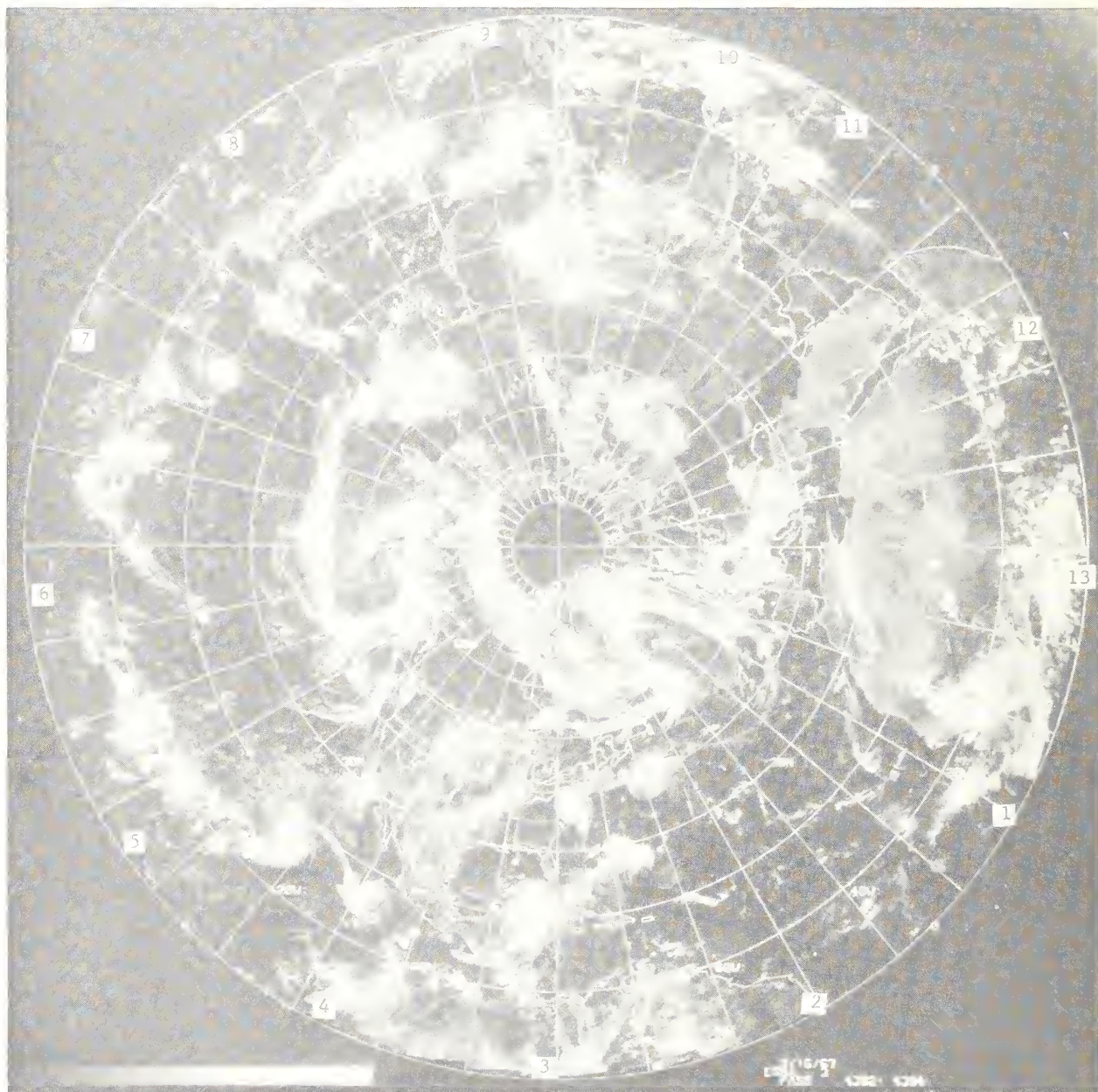


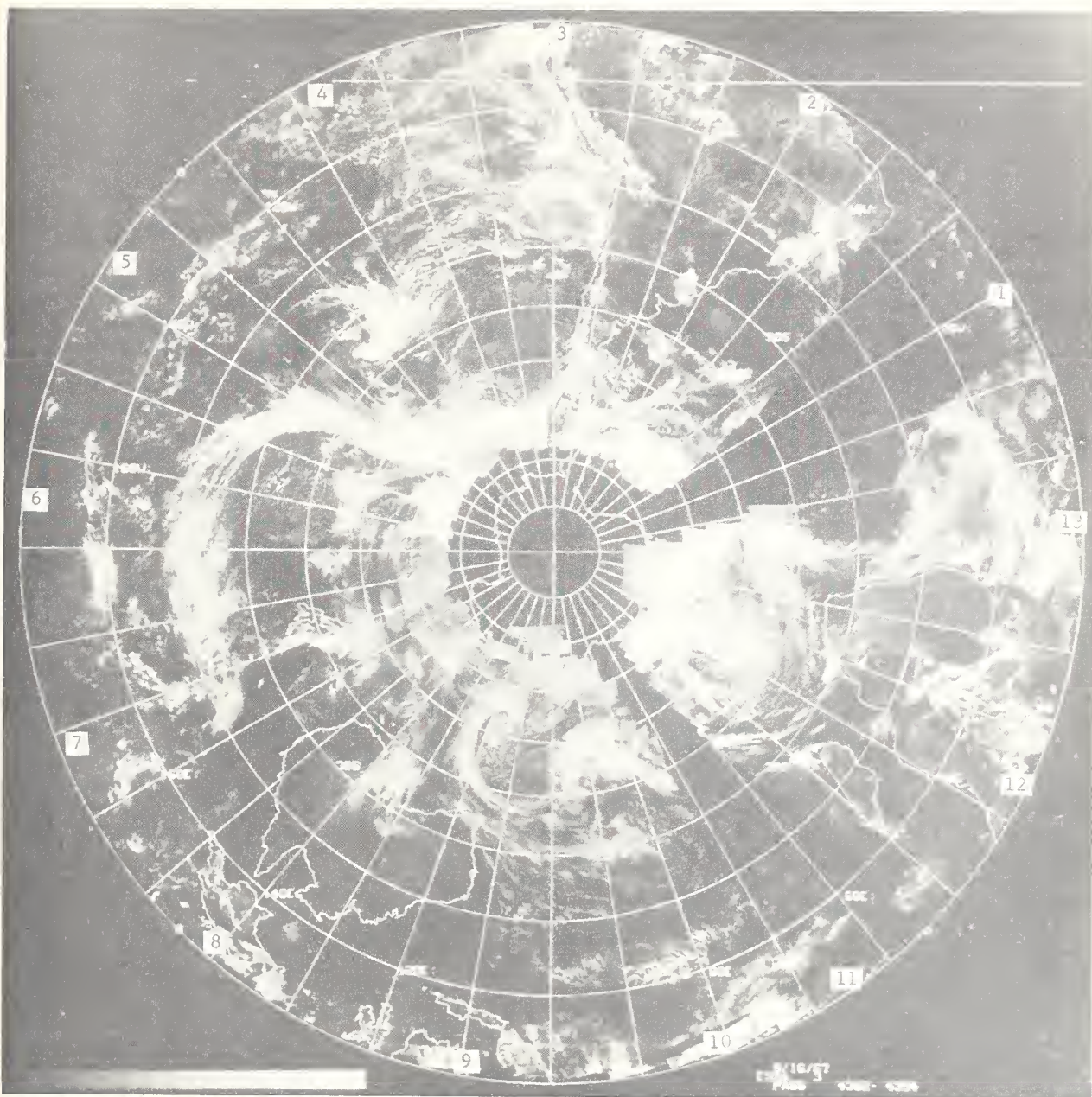


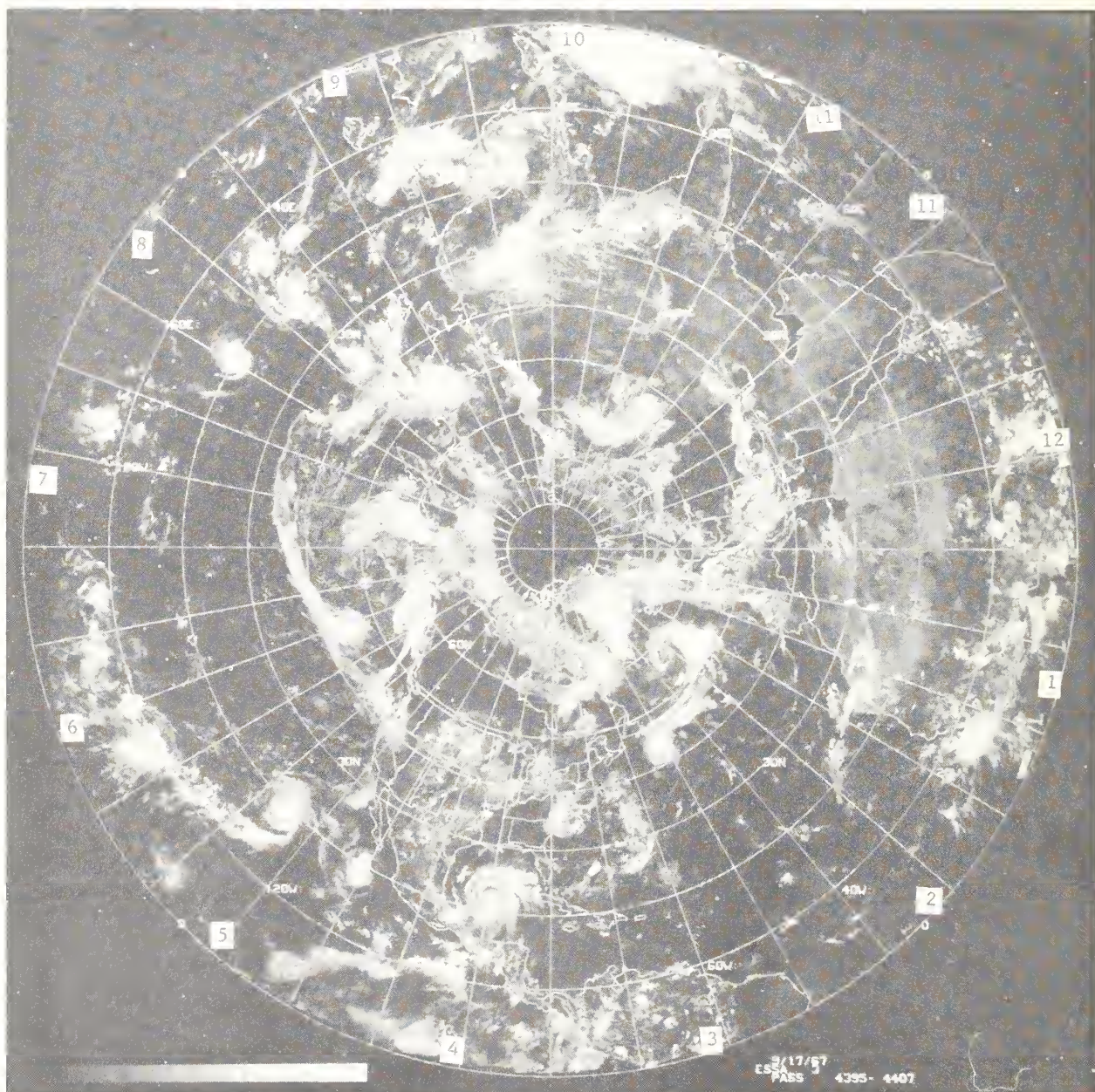


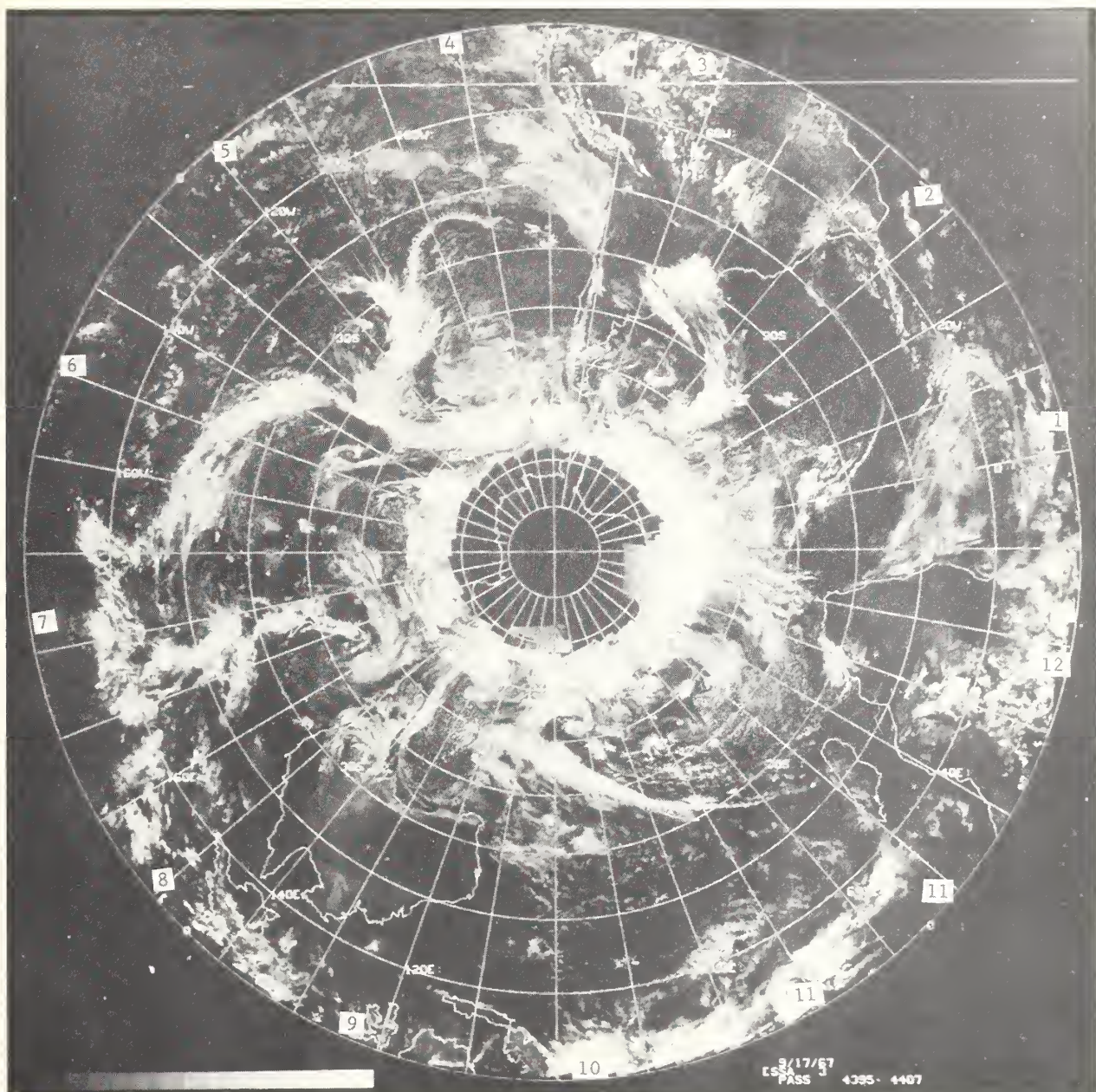


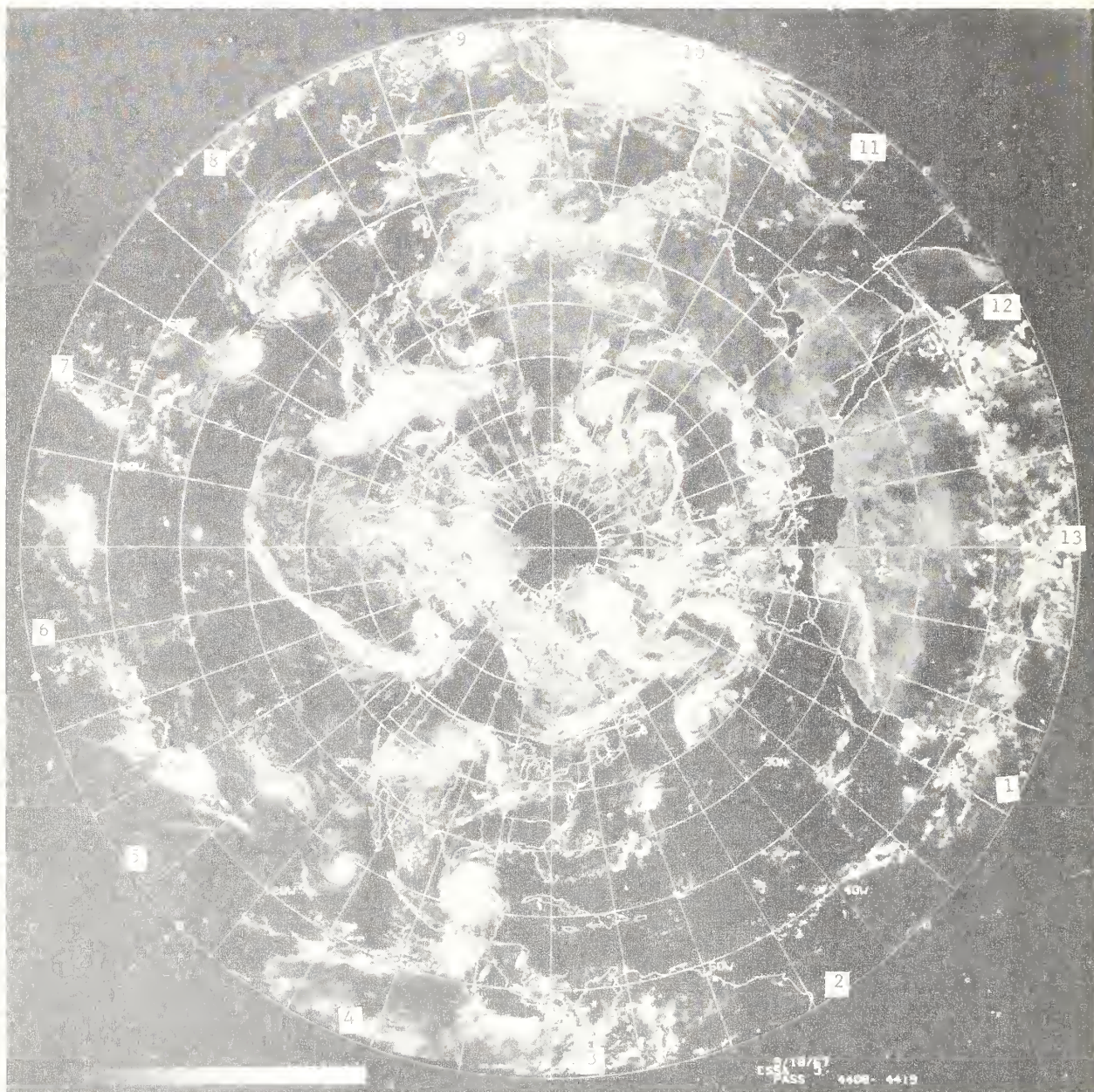


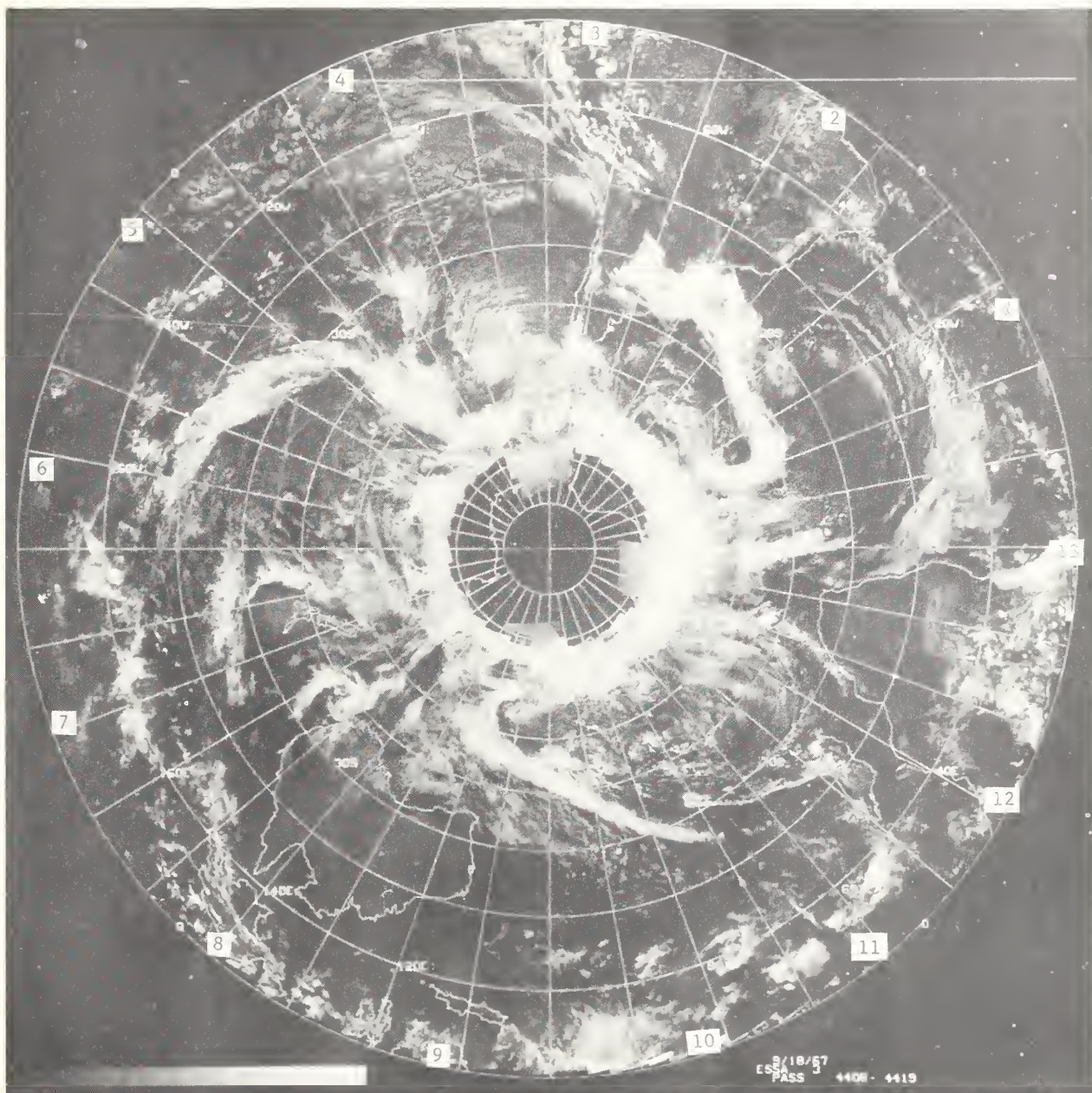


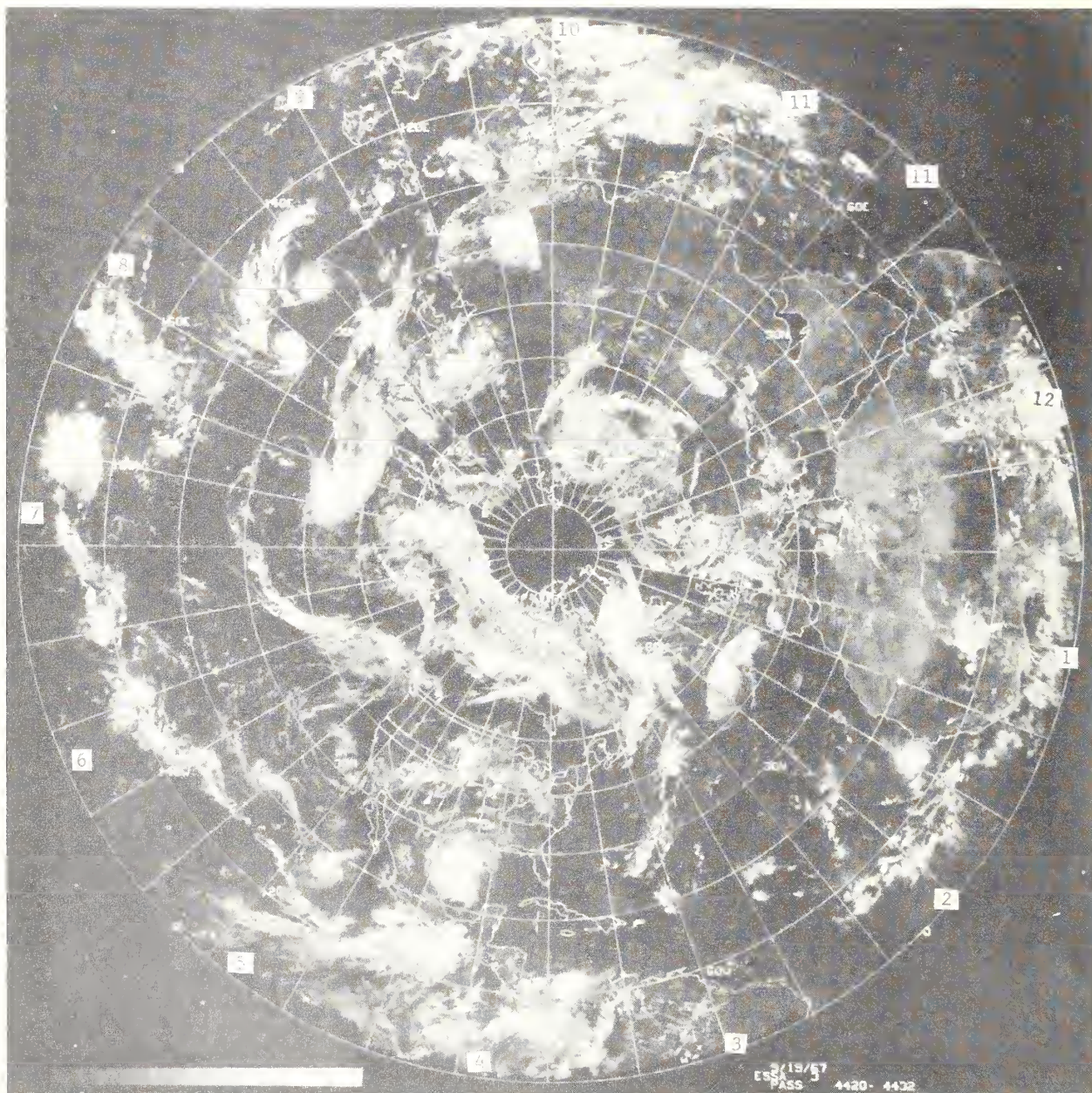


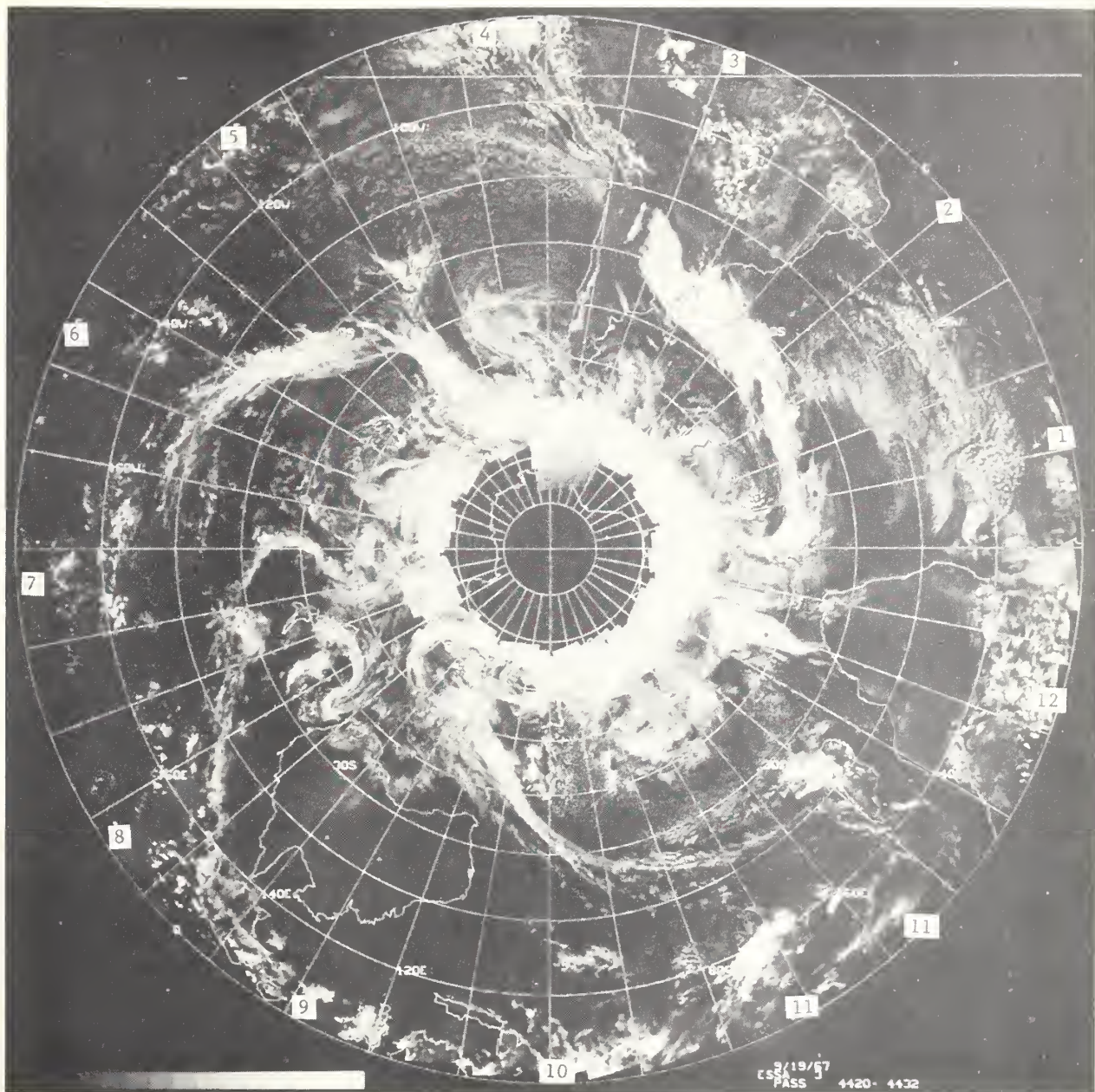


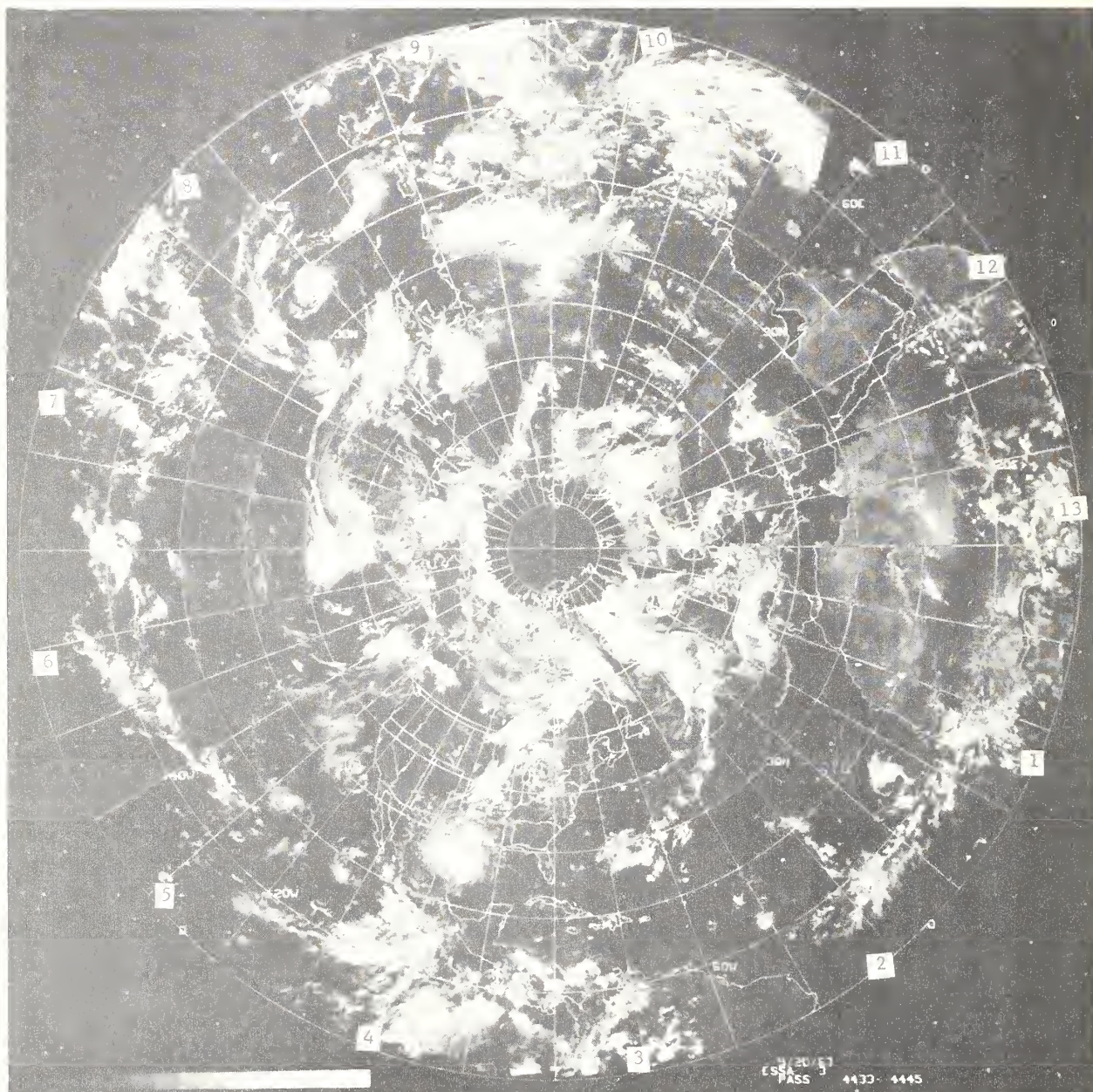


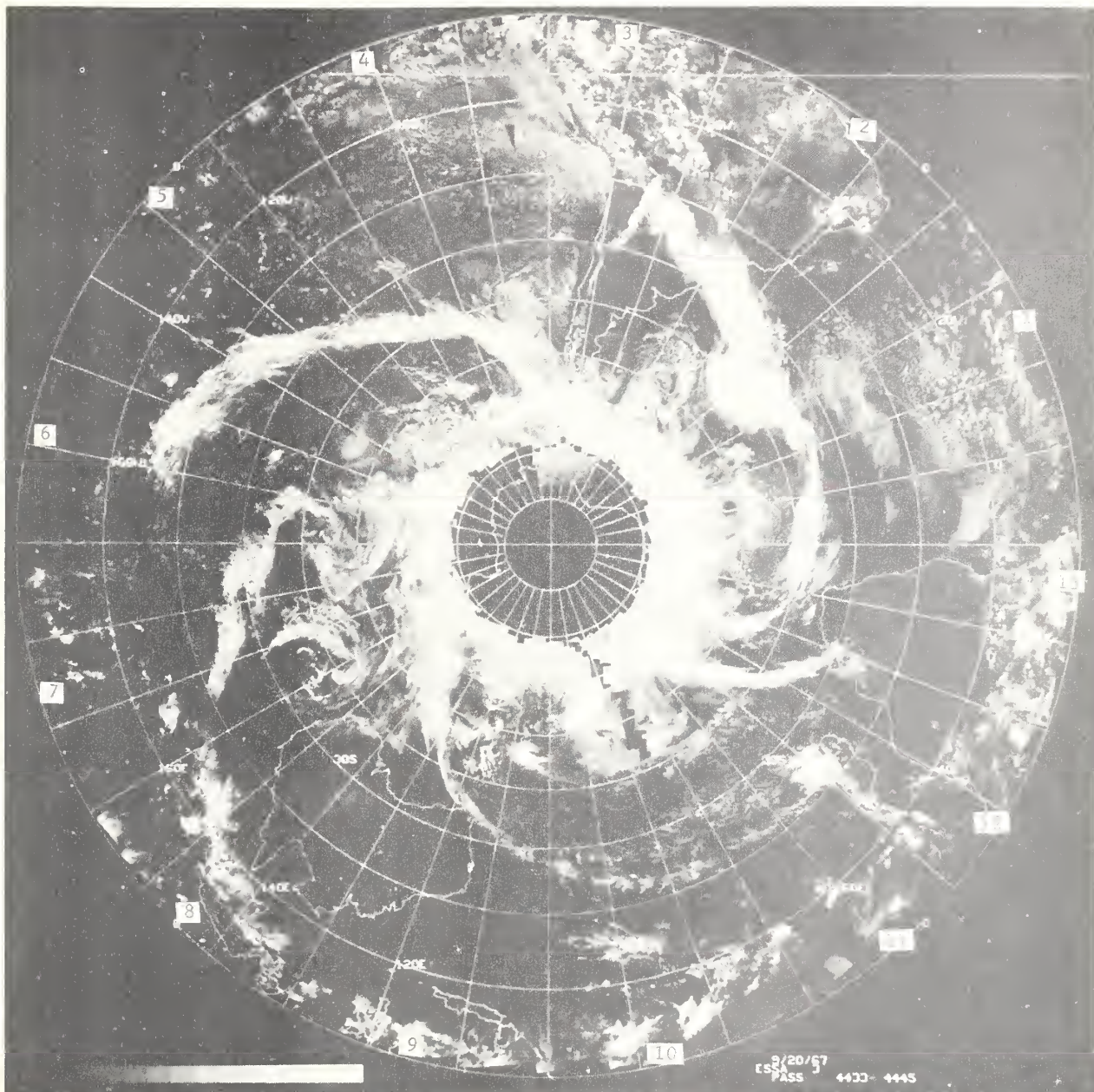




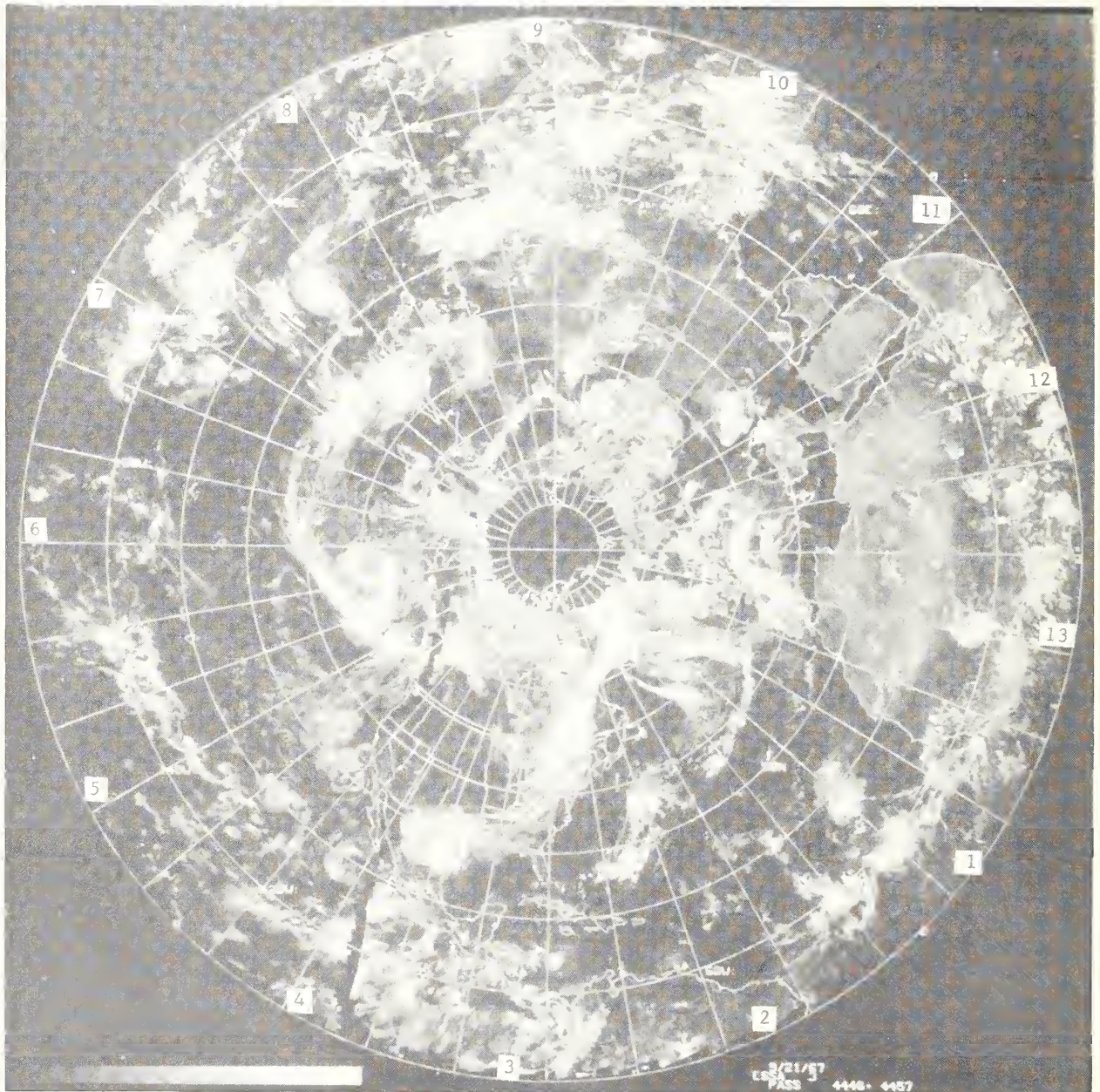


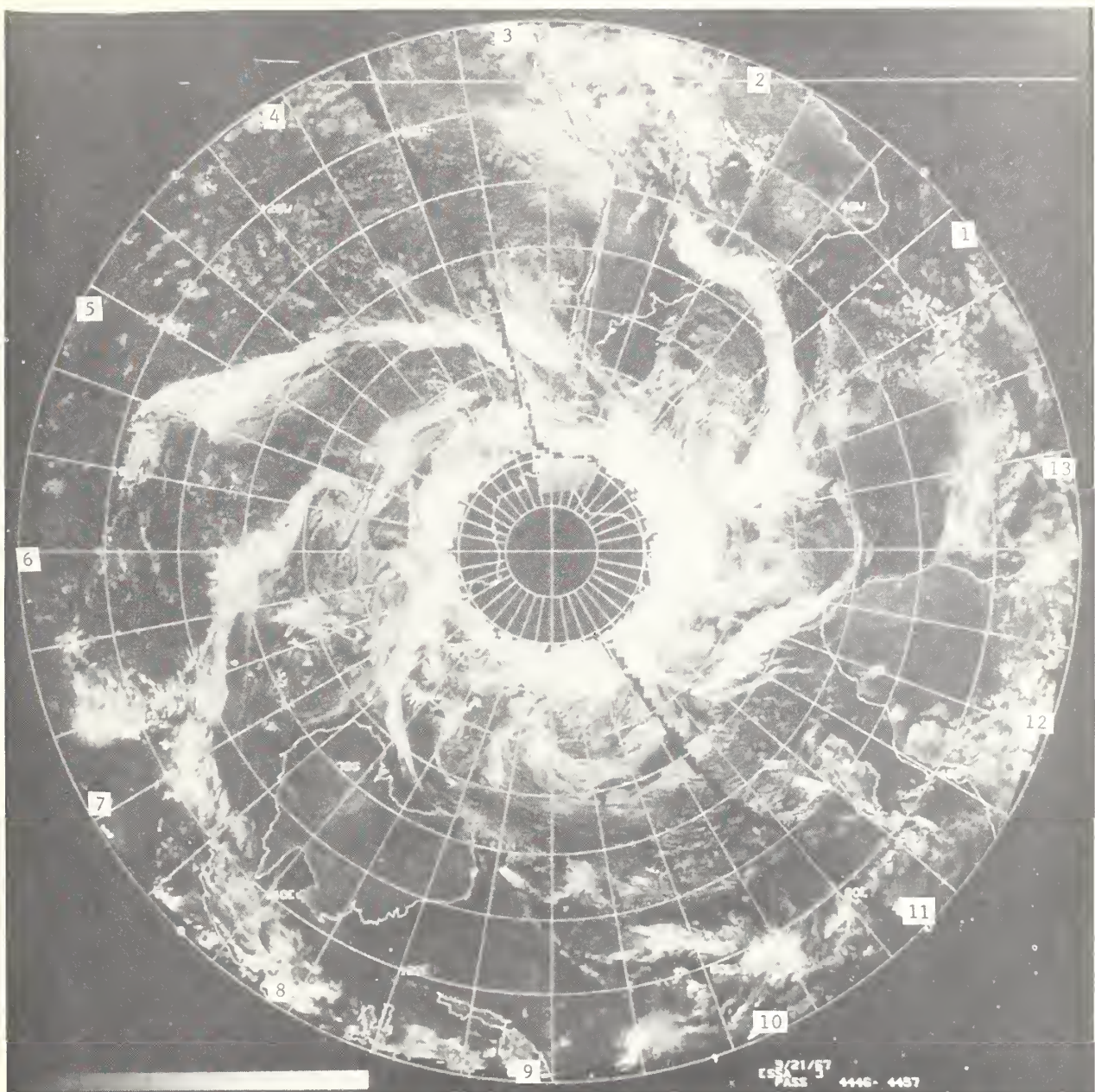


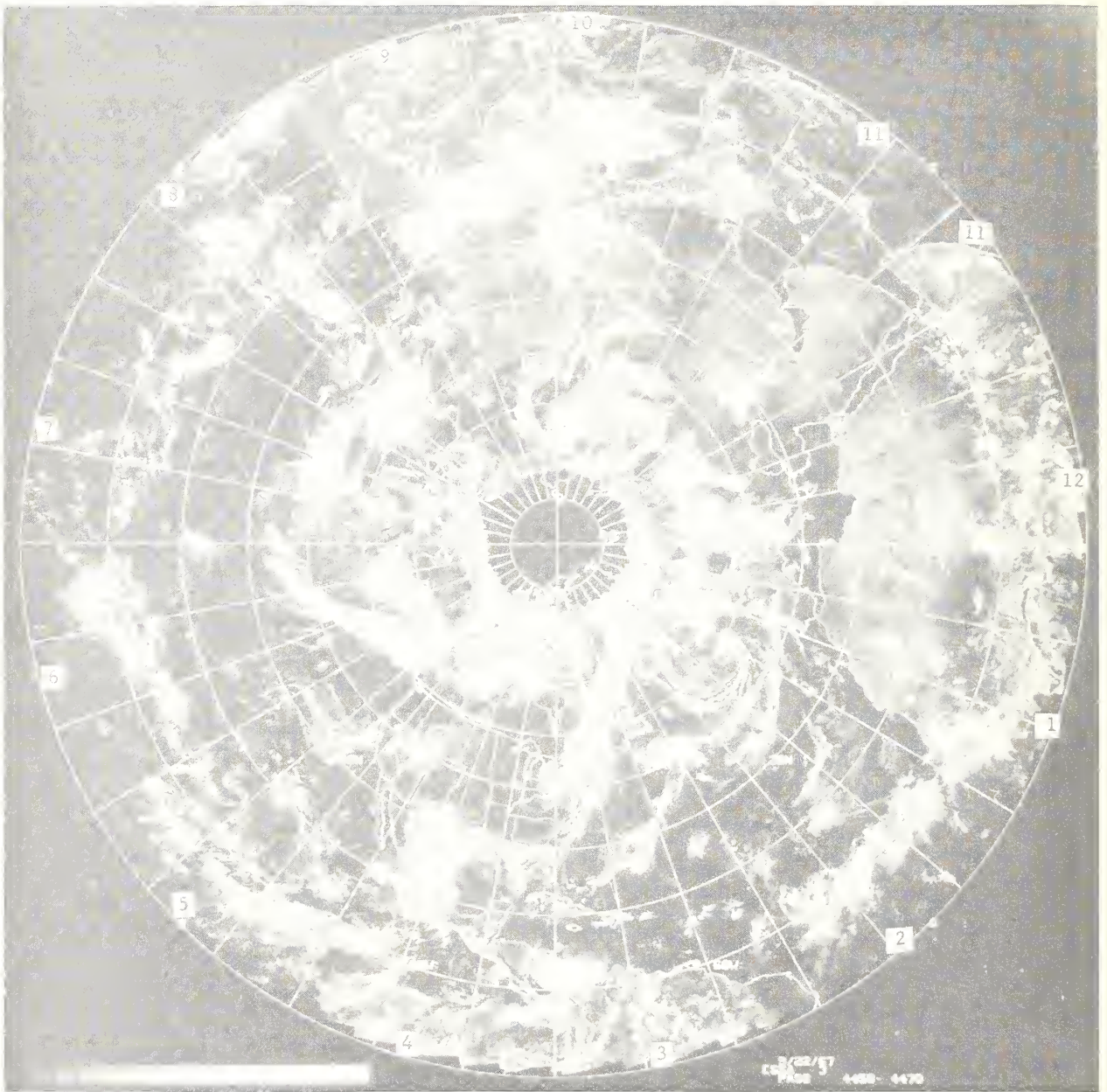


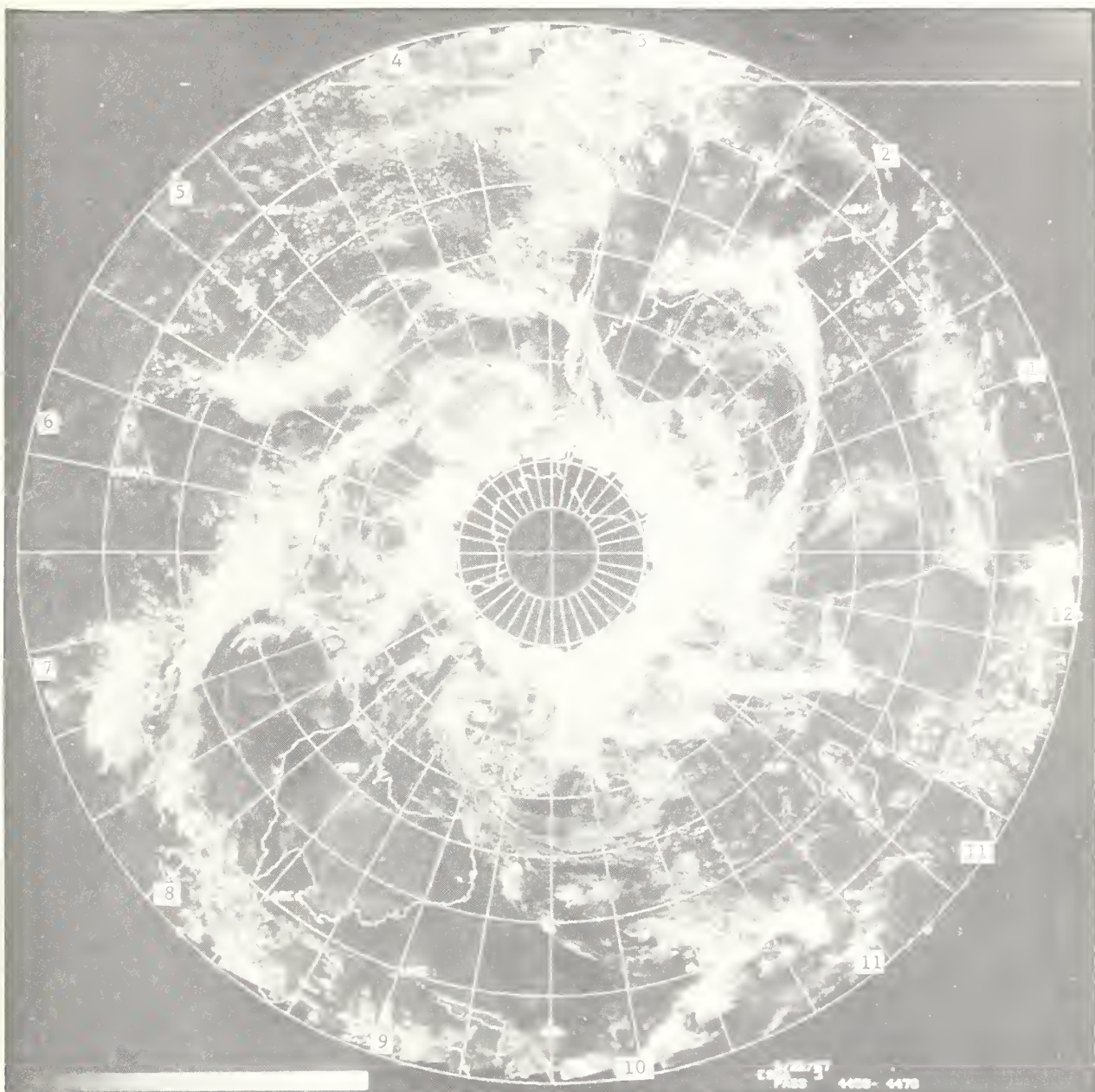


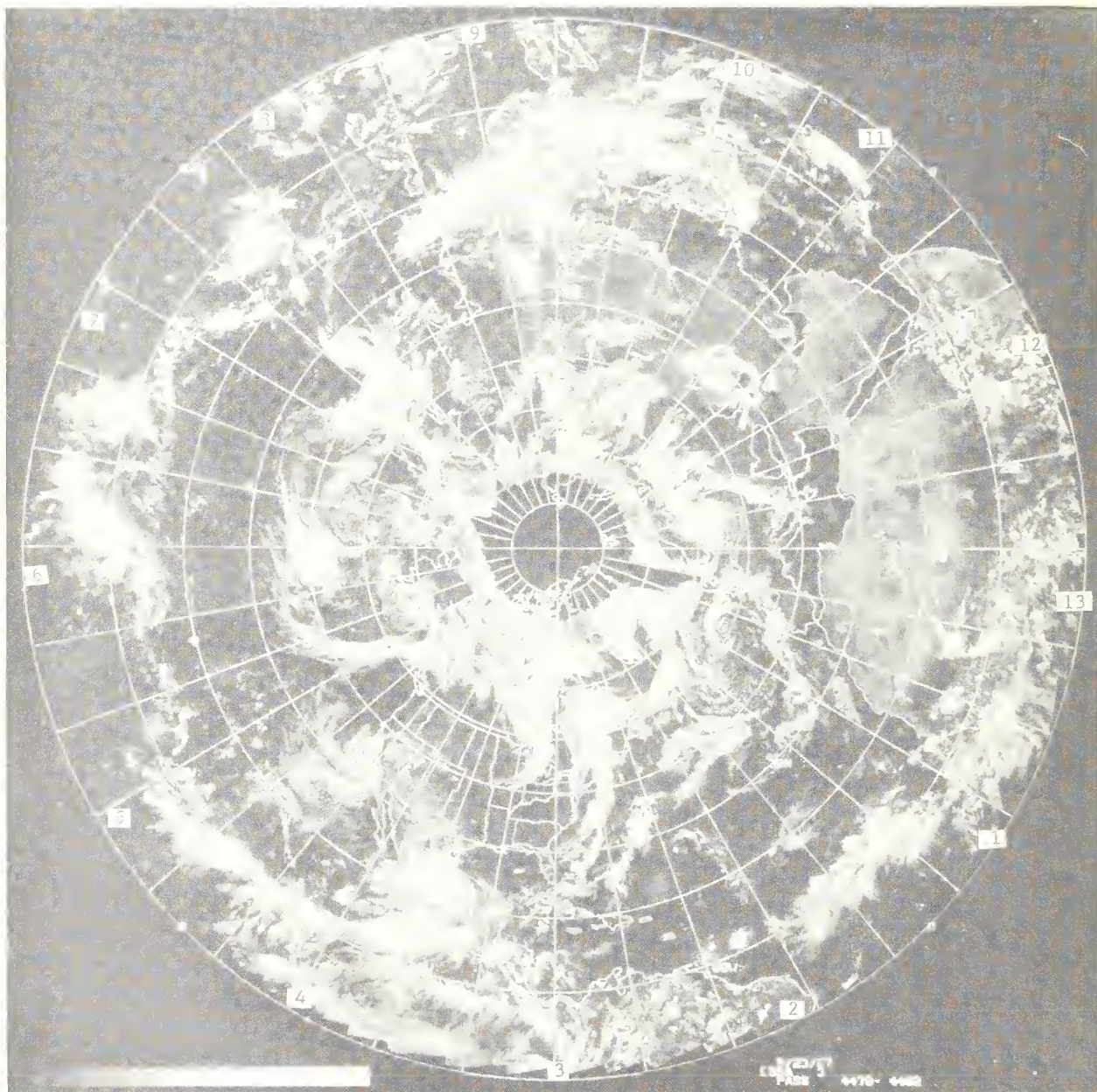
8/20/67
ESSA
PASS 4433-4445

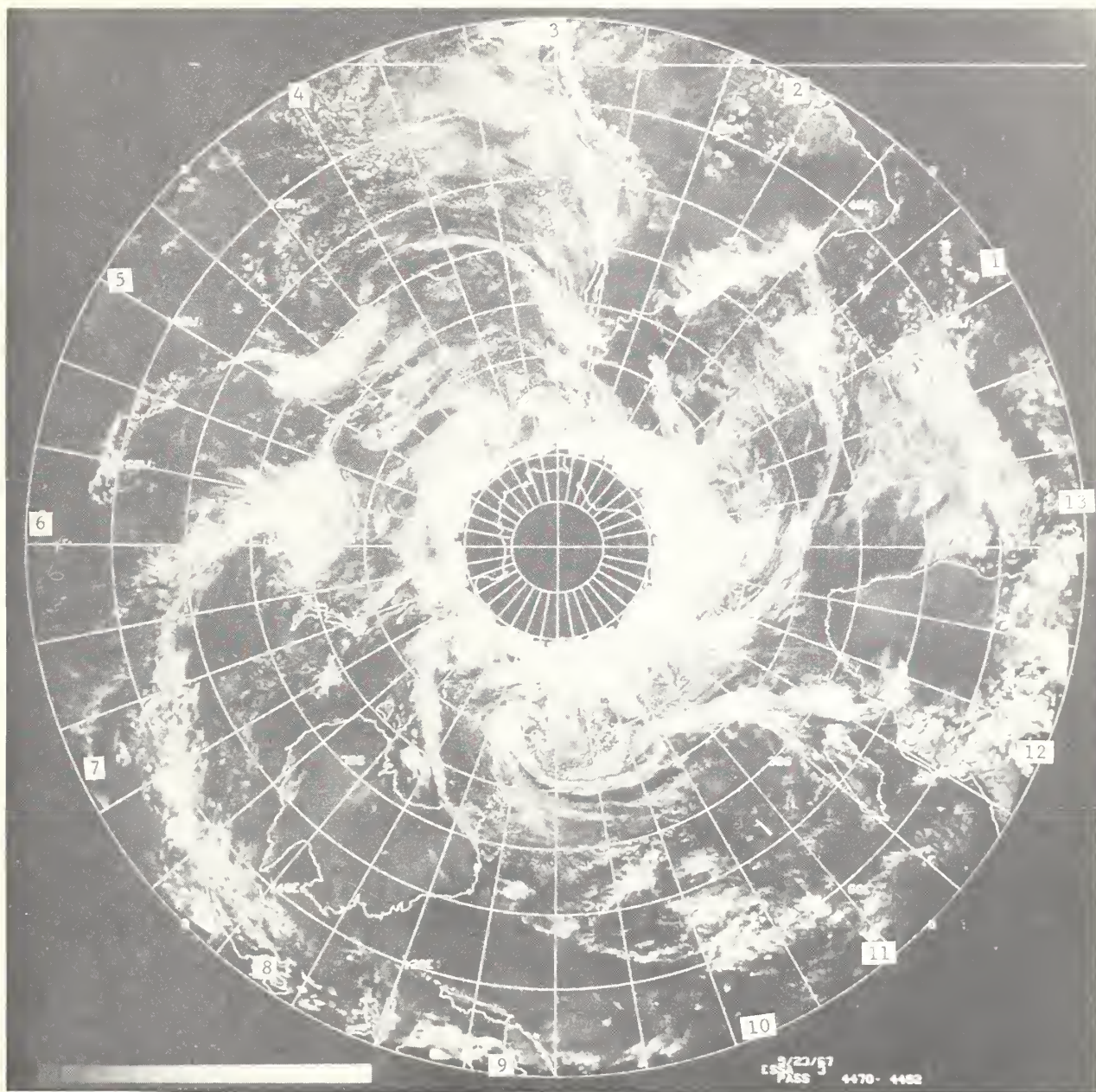


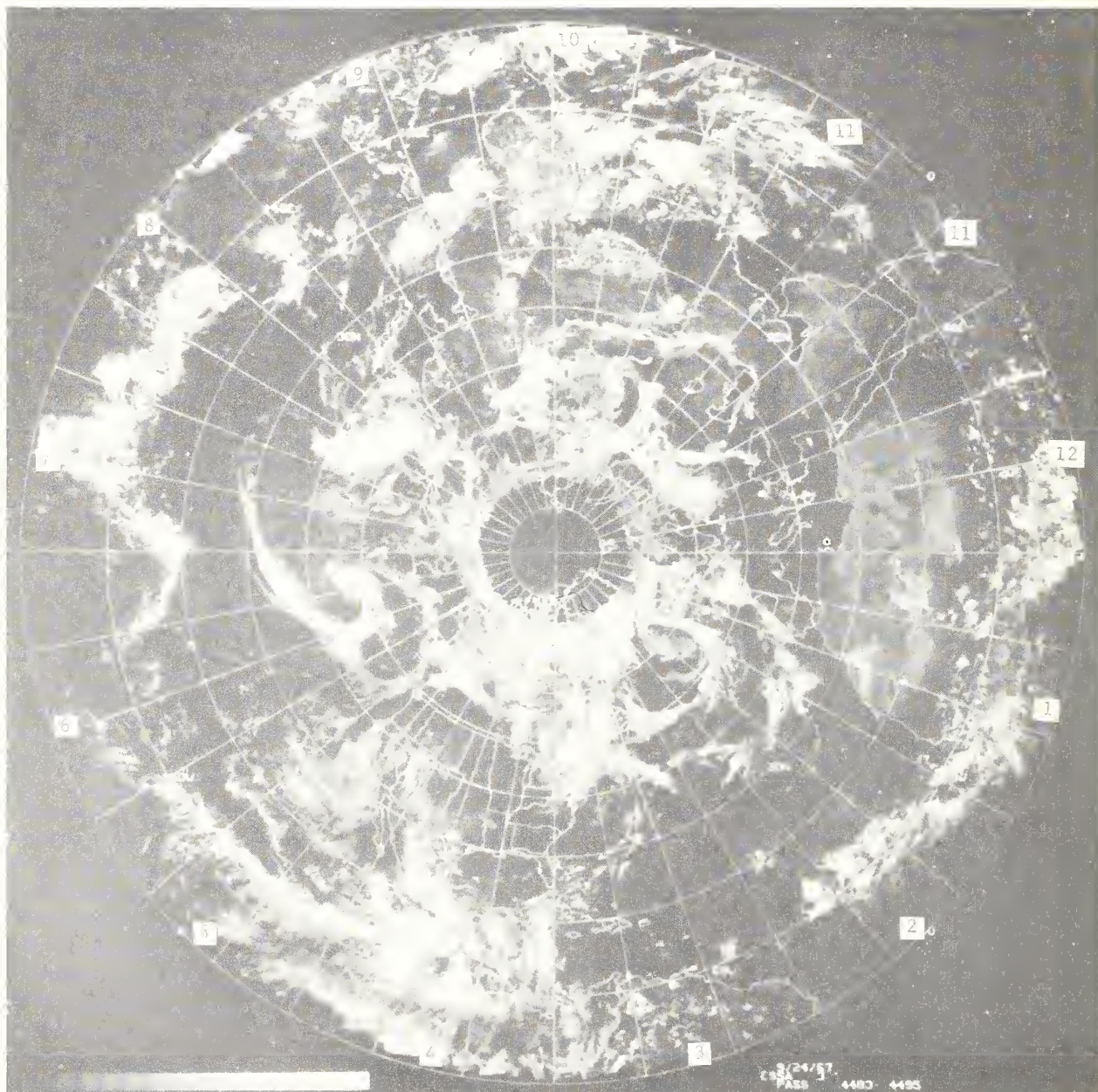


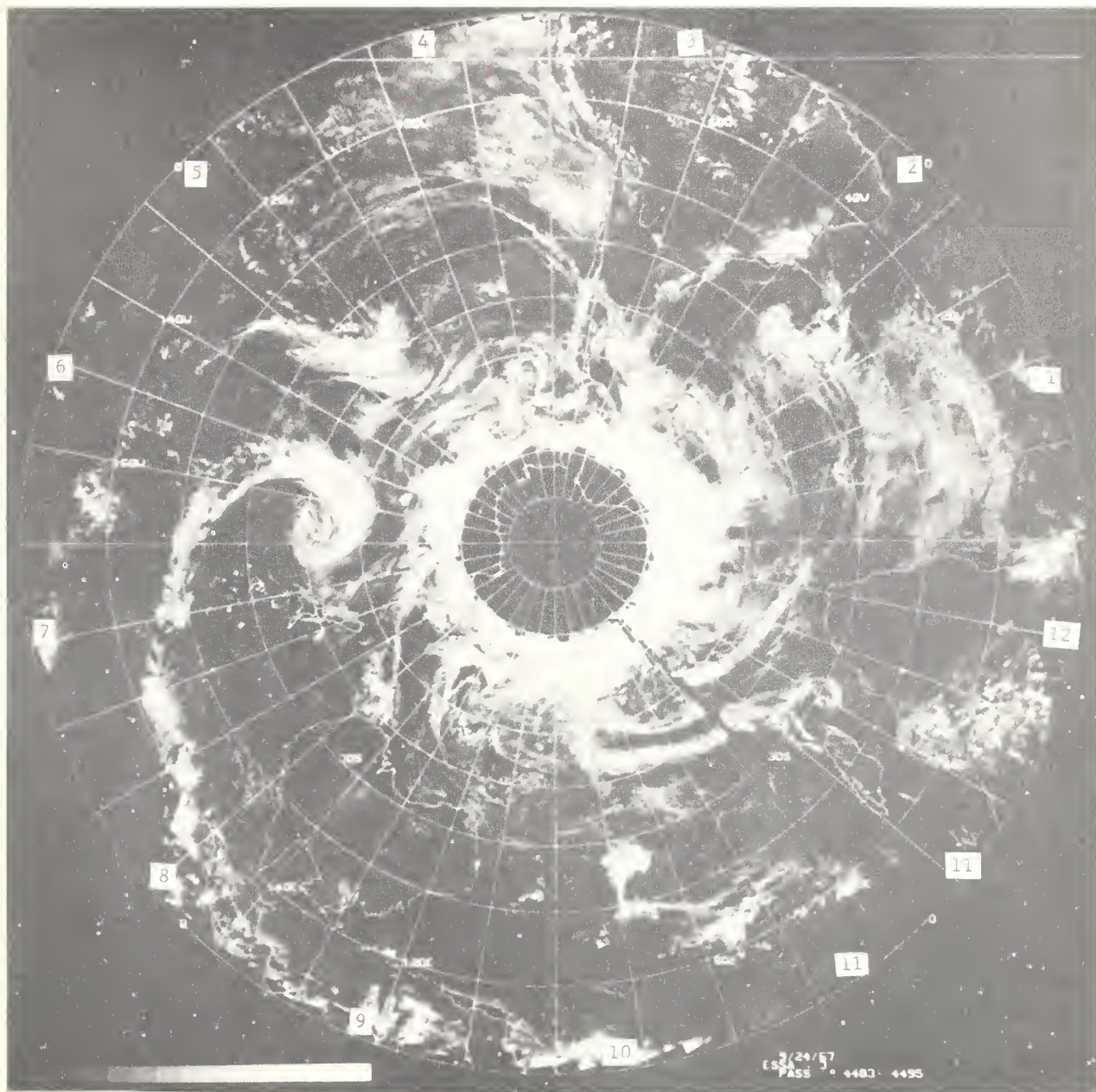




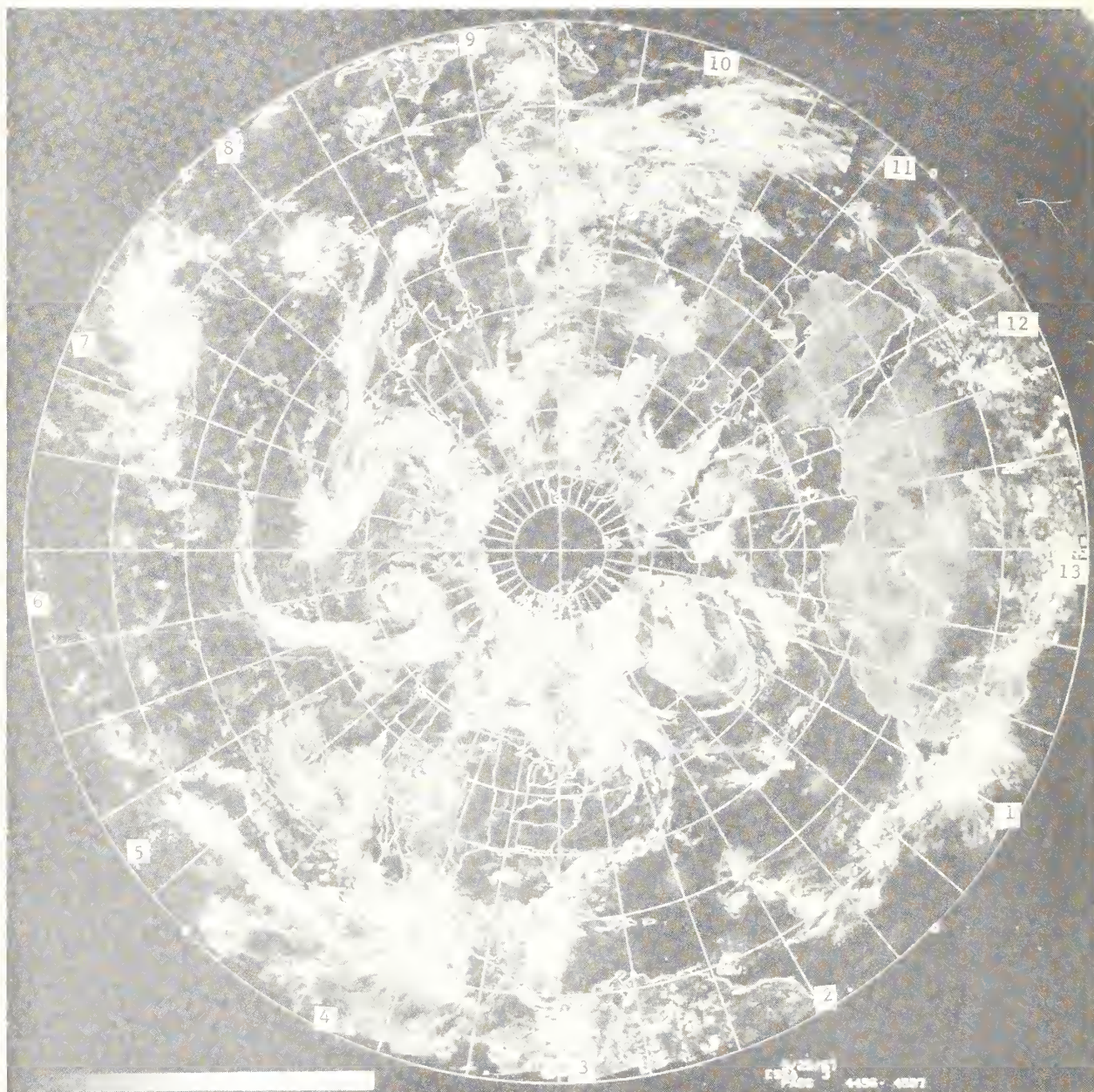


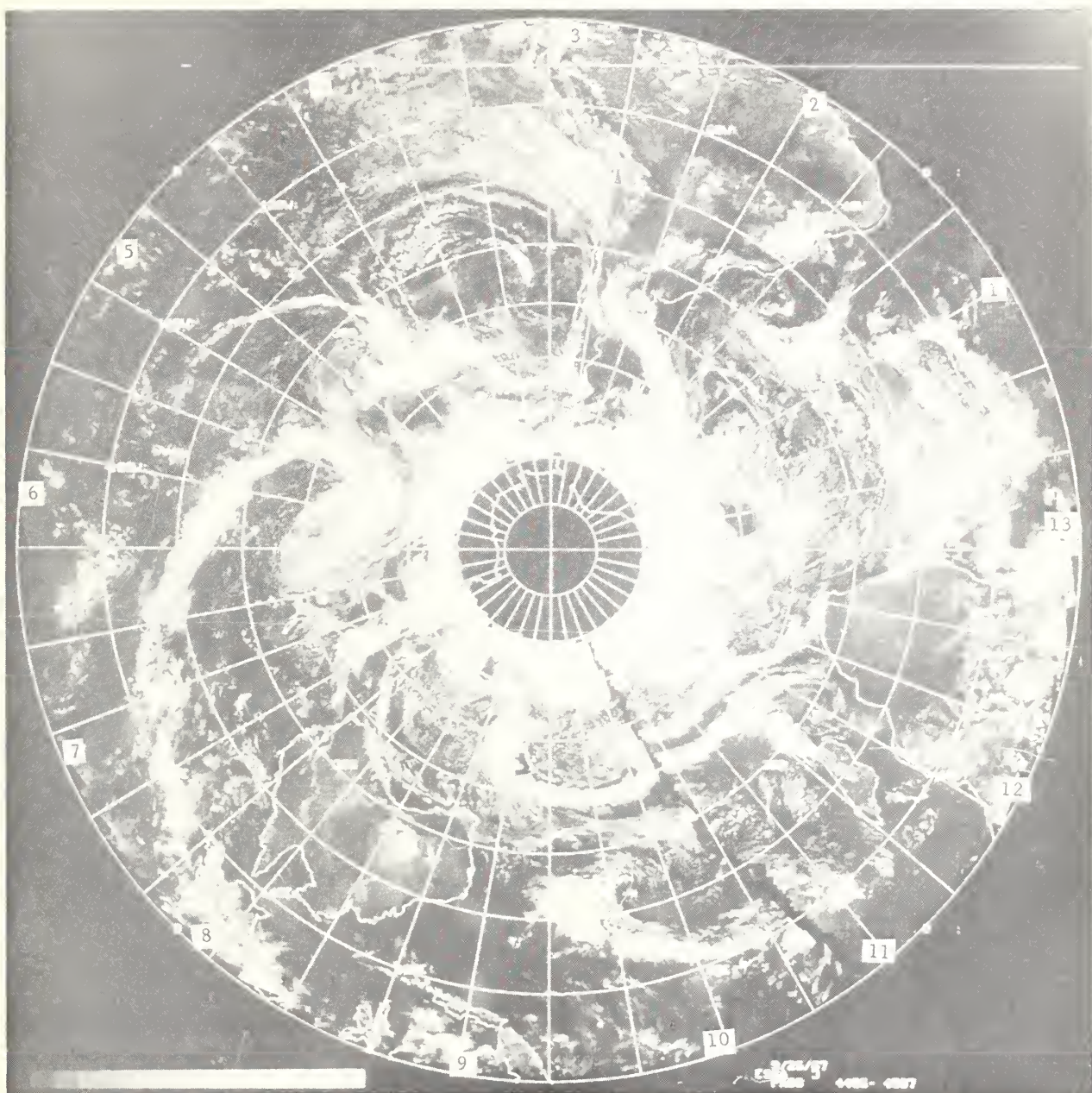




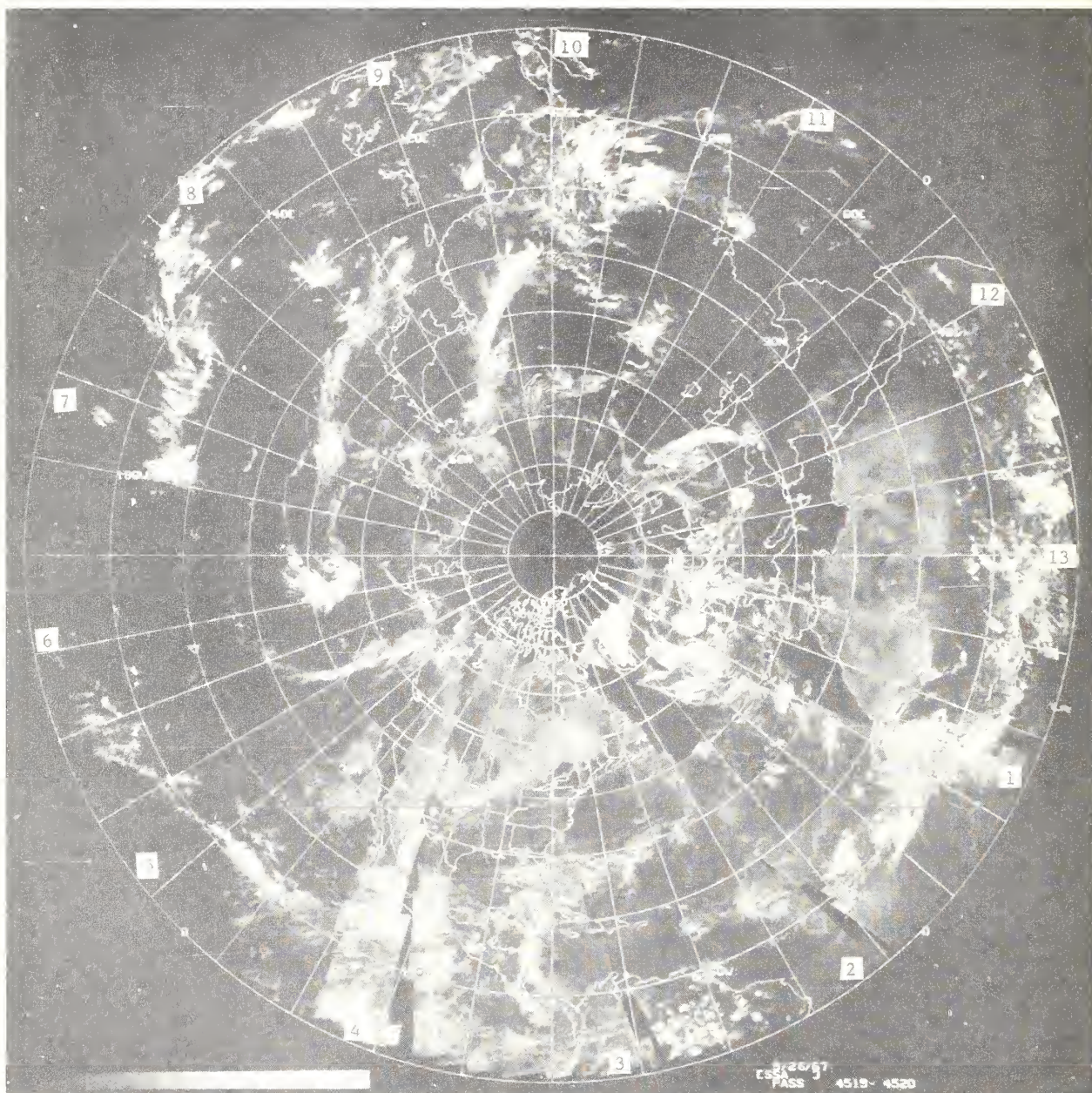


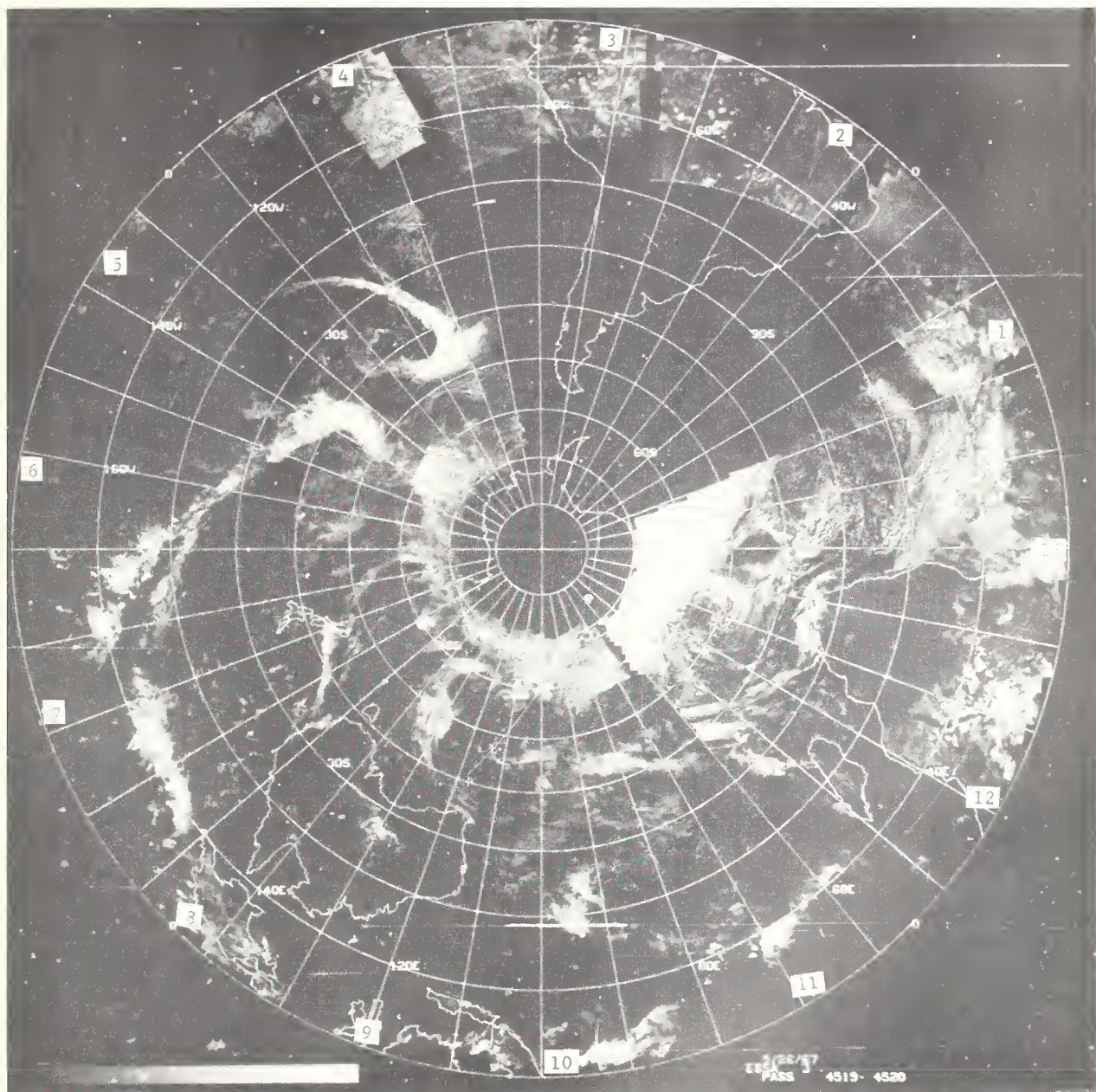
2/24/57
PASS 0 4483 4495

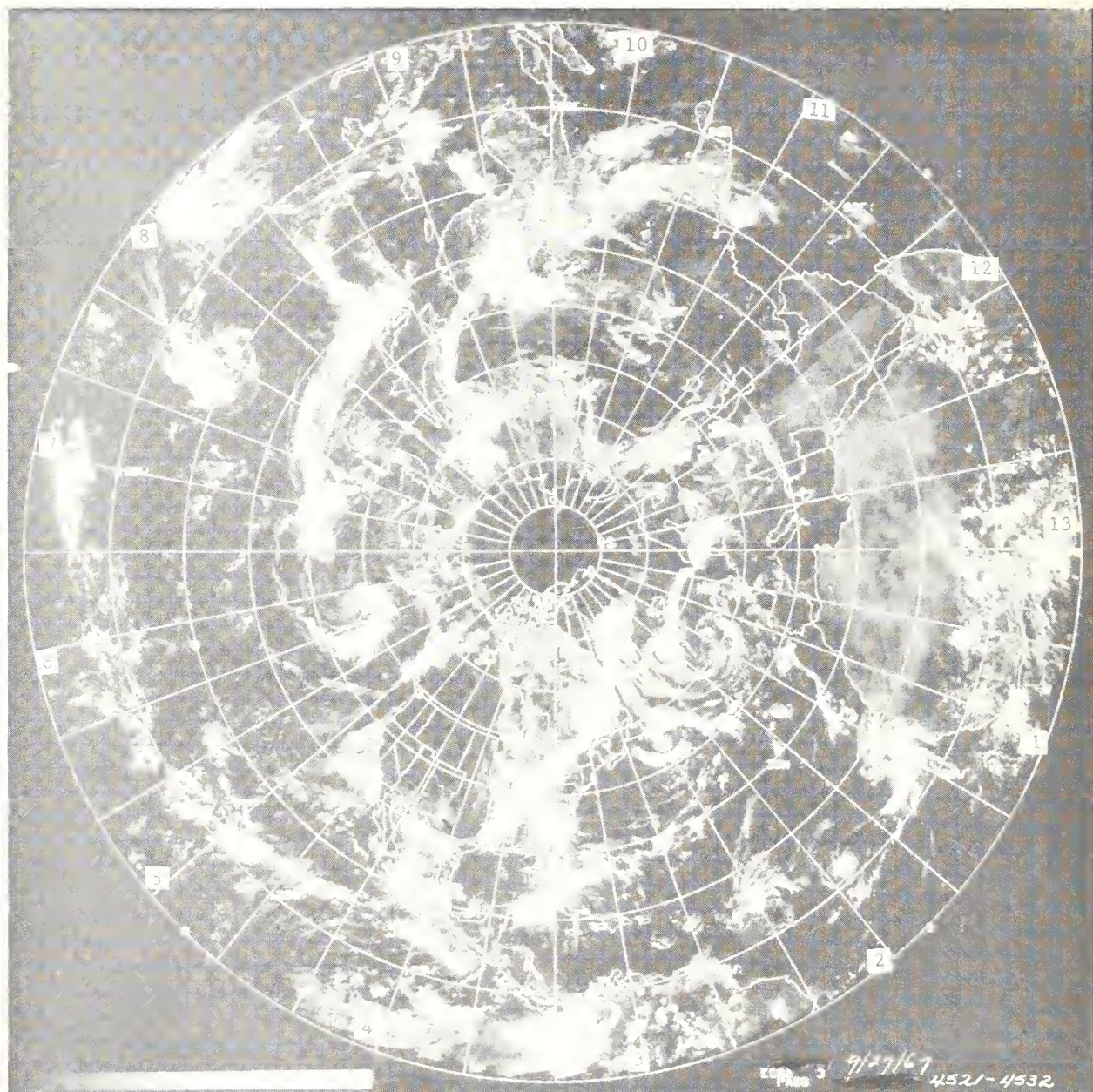


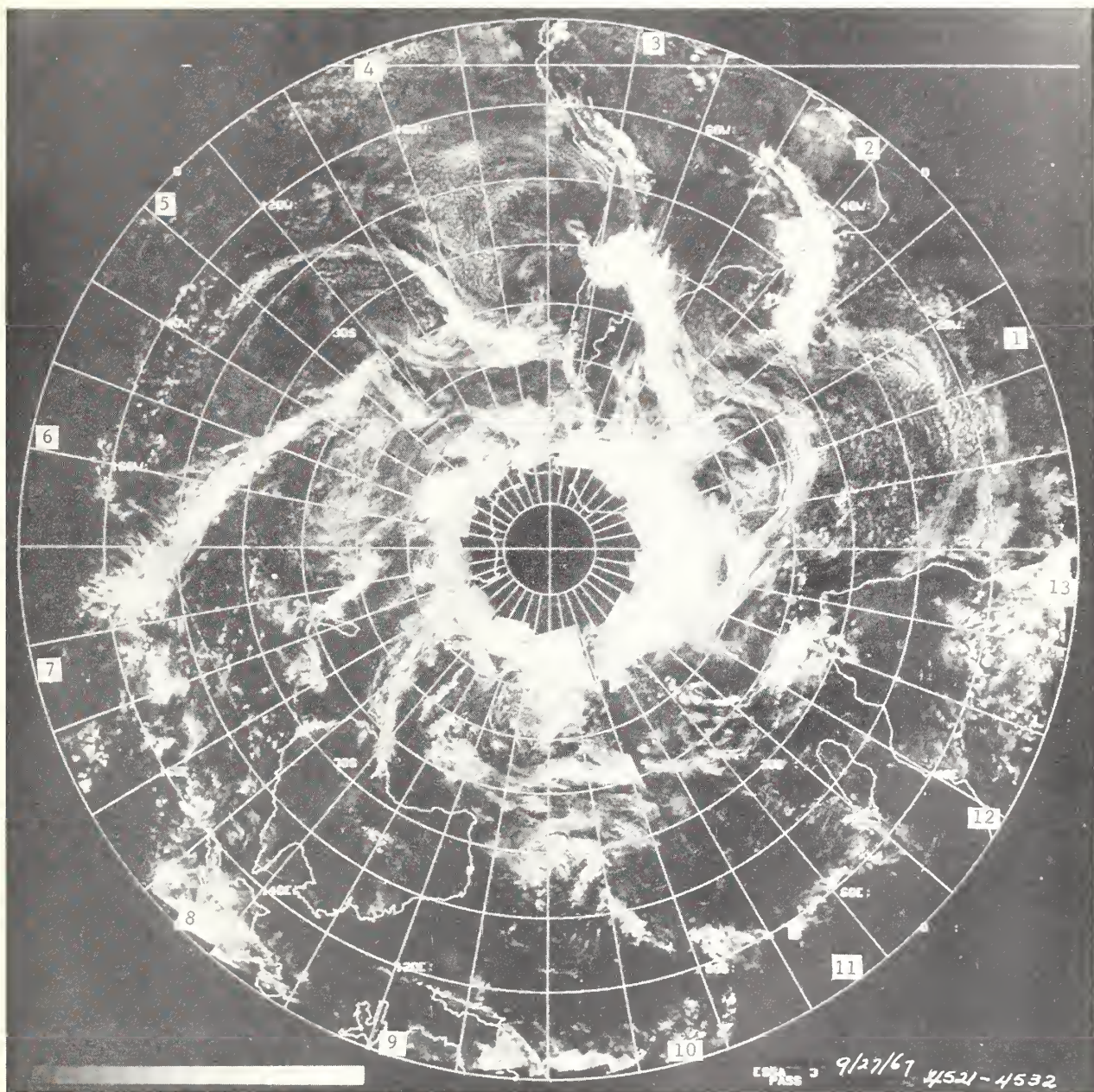


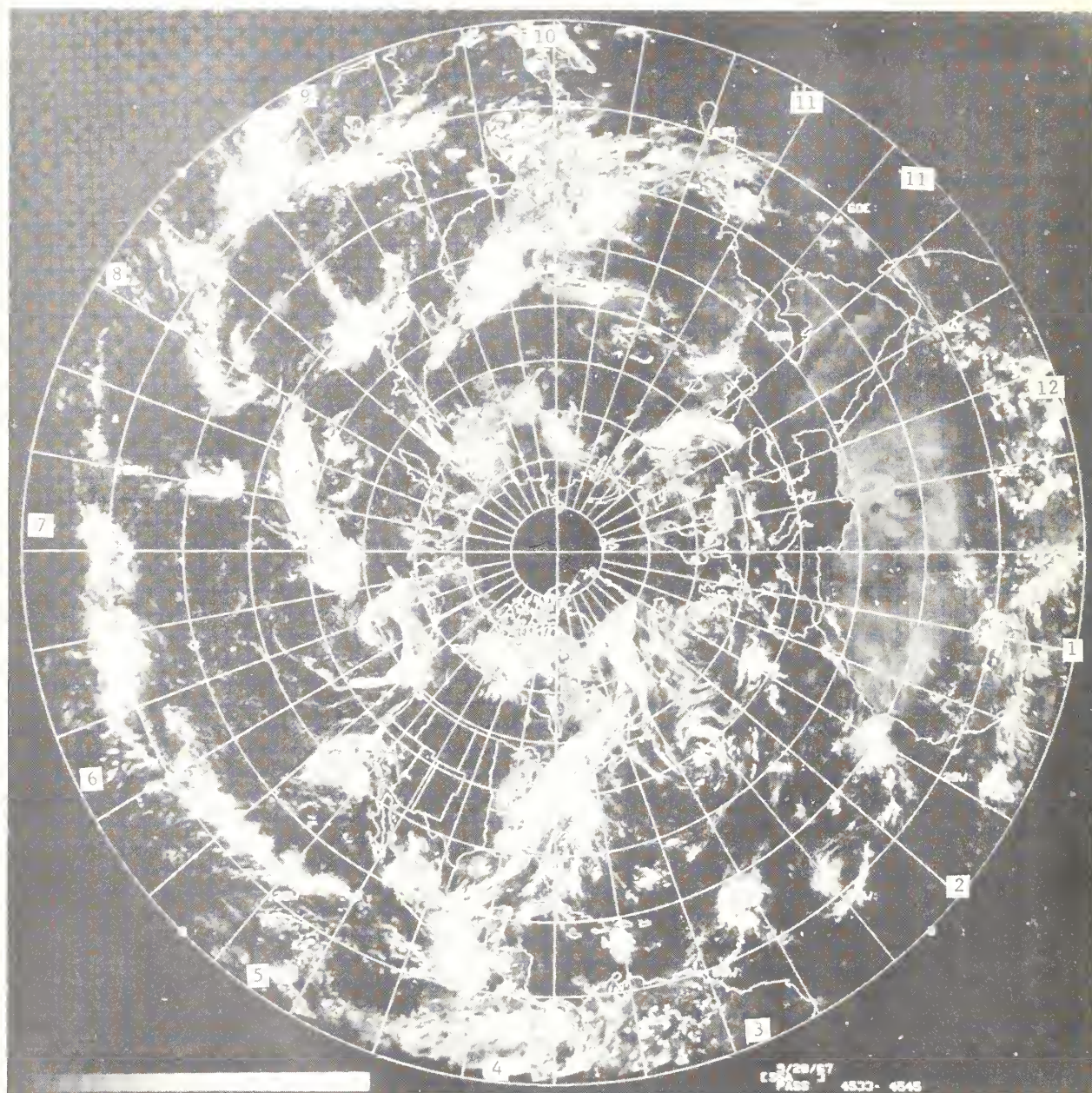
3/25/57
4000-4007

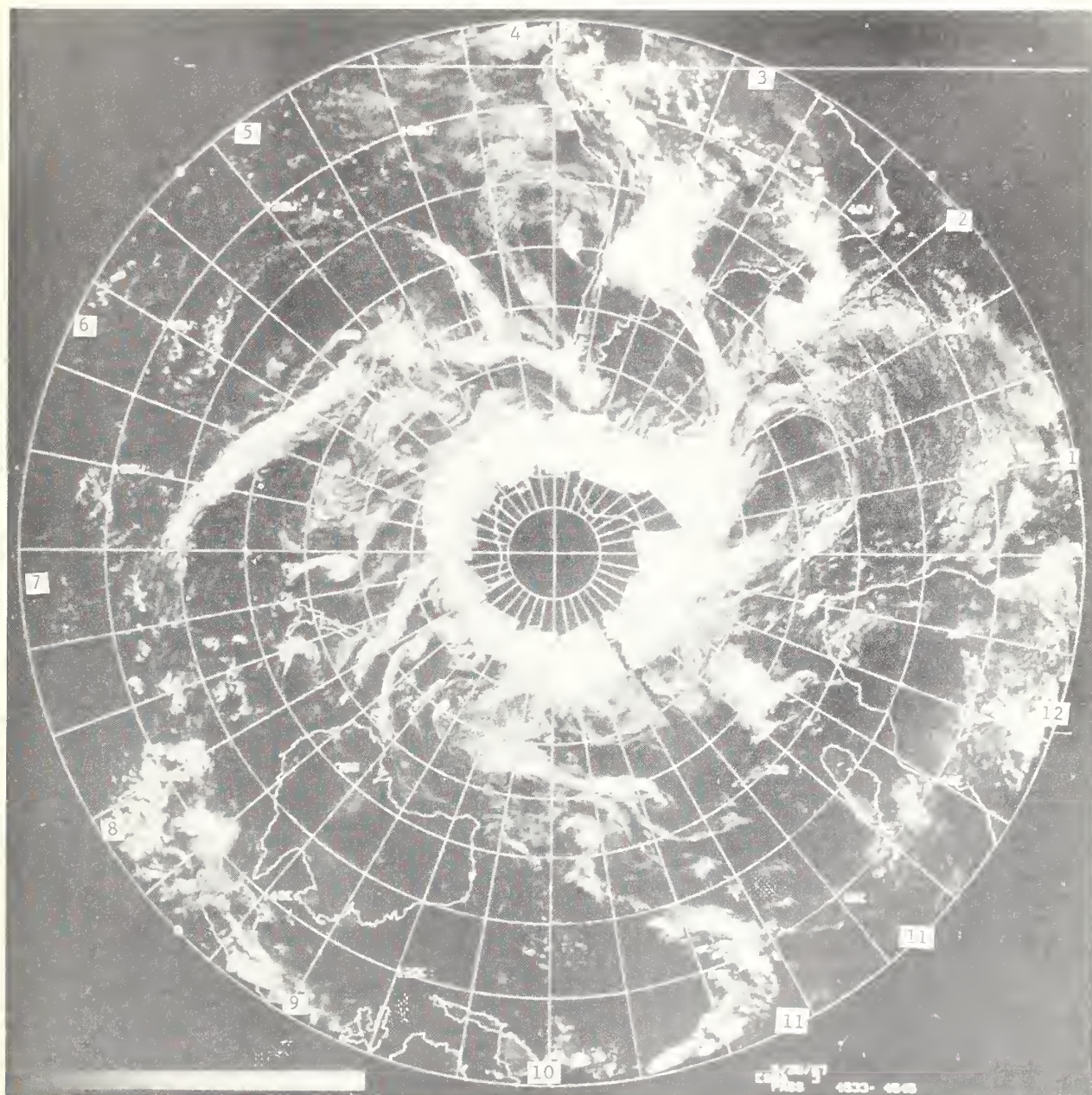


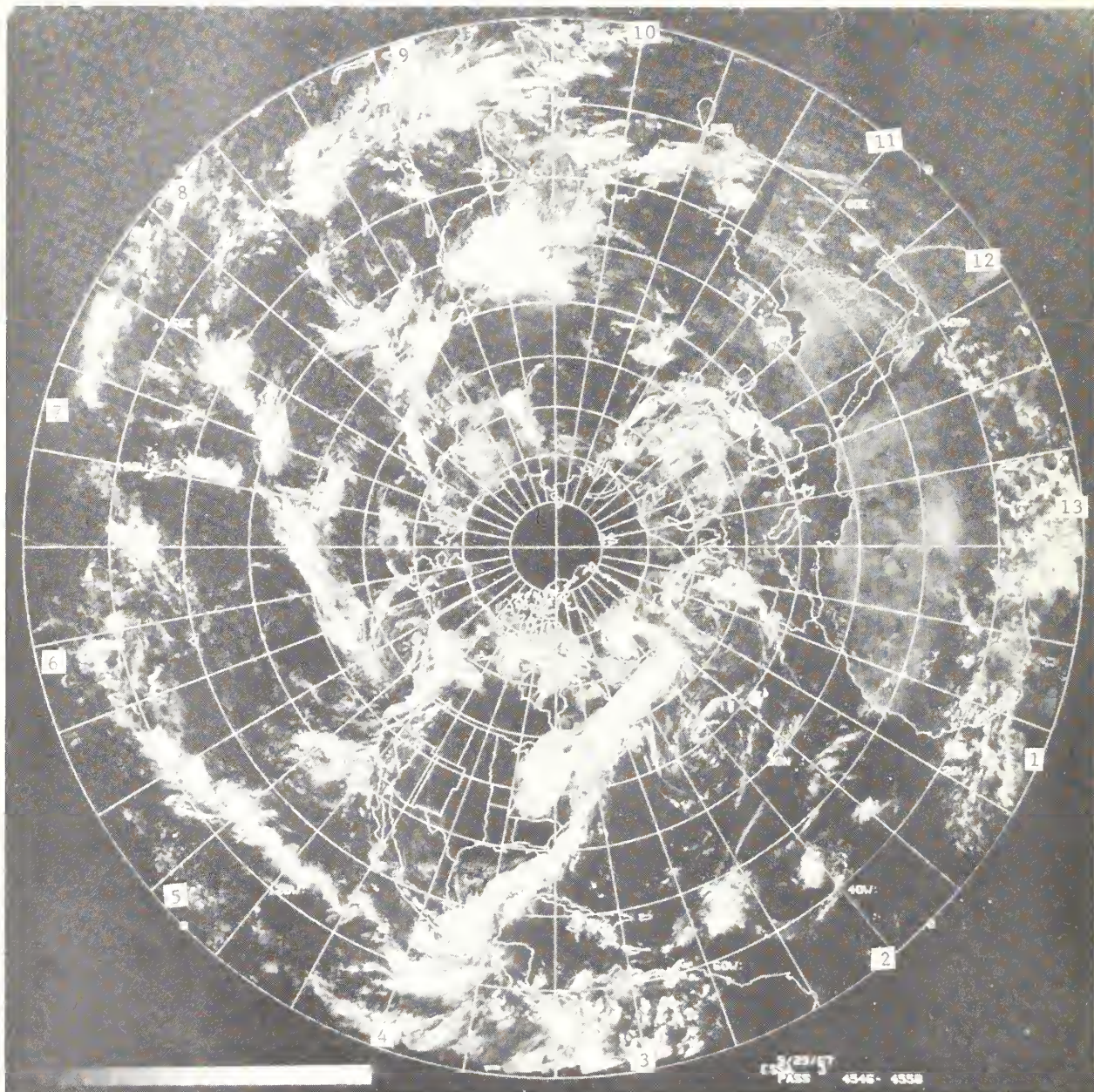


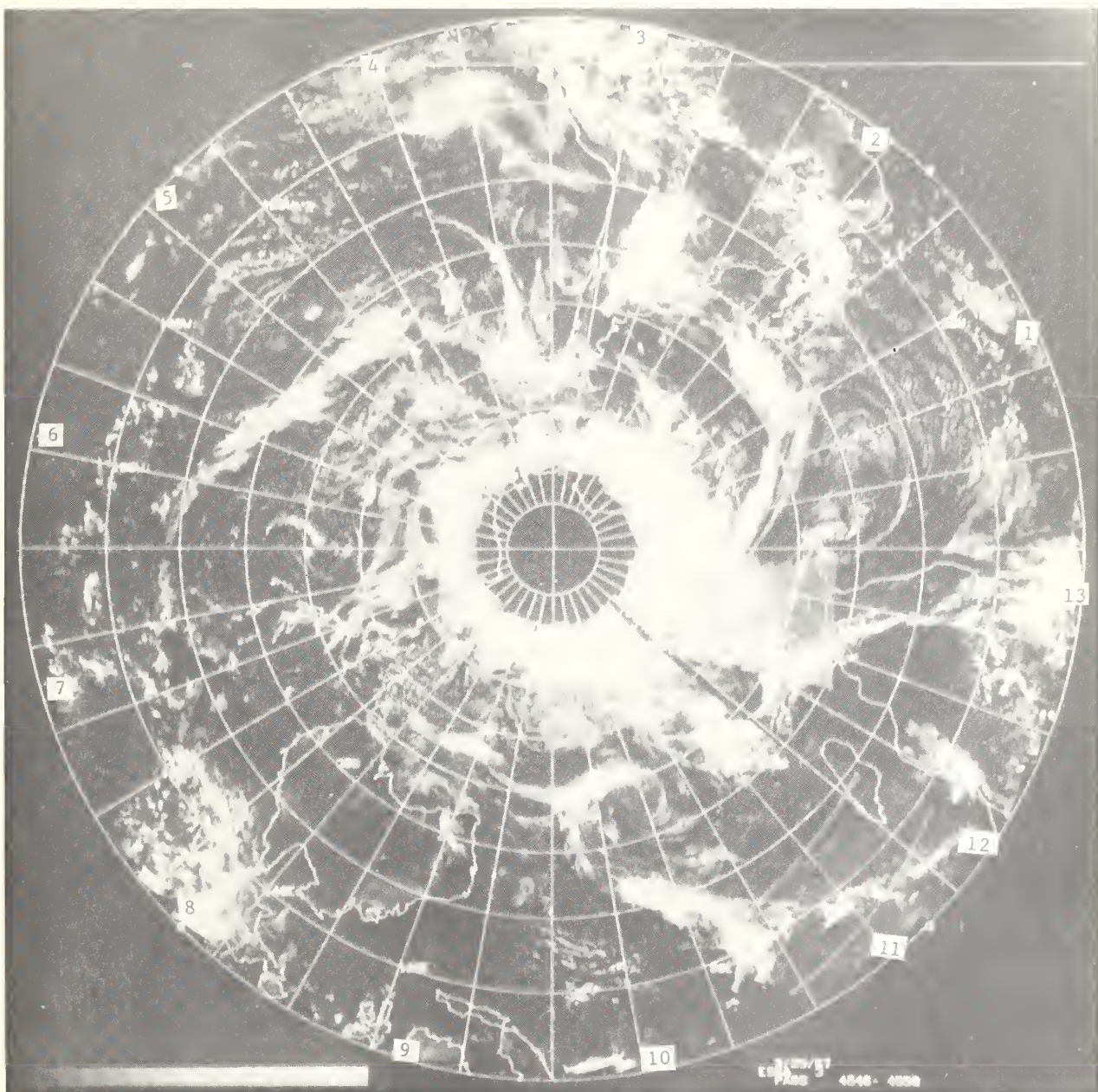


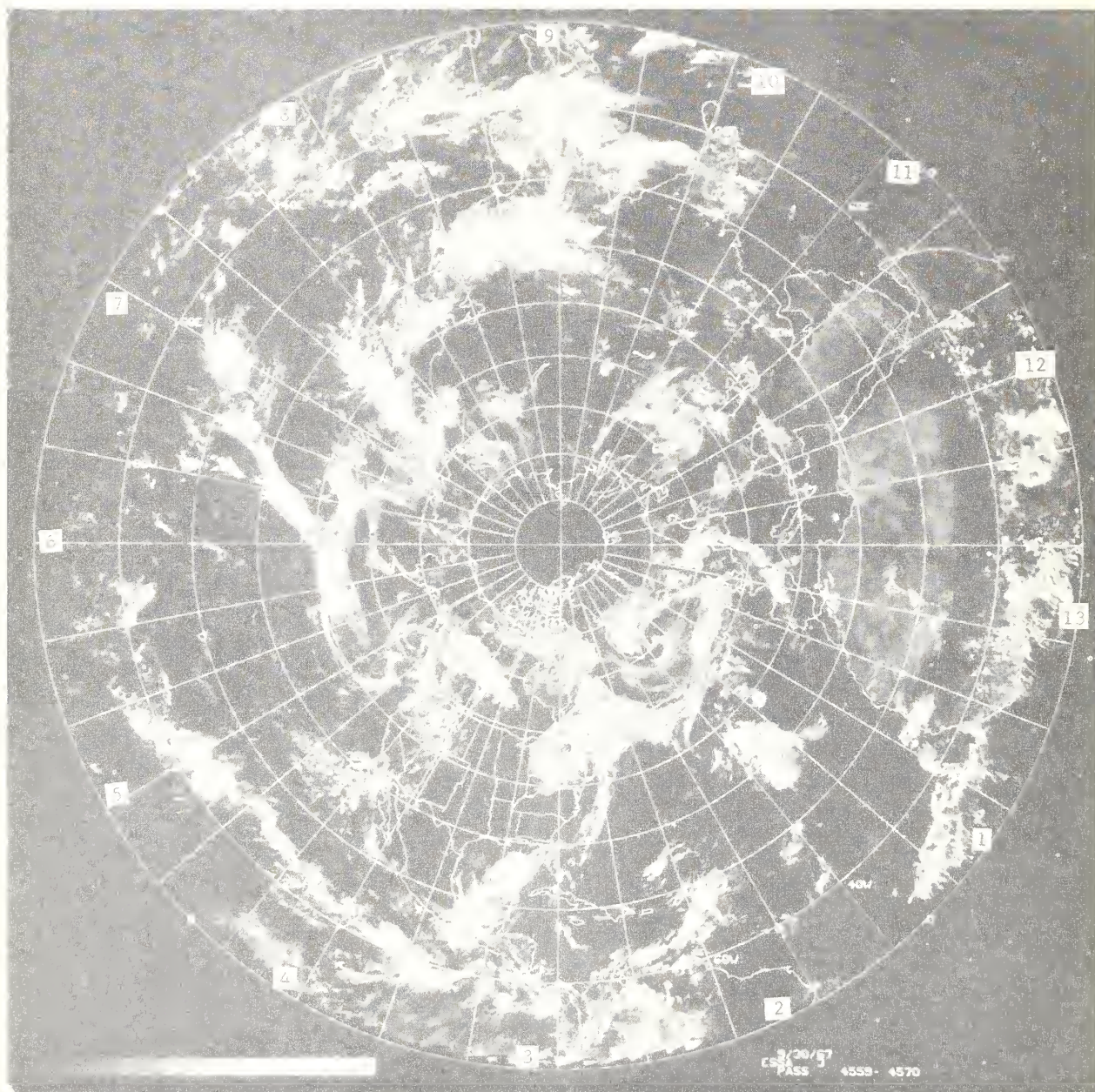


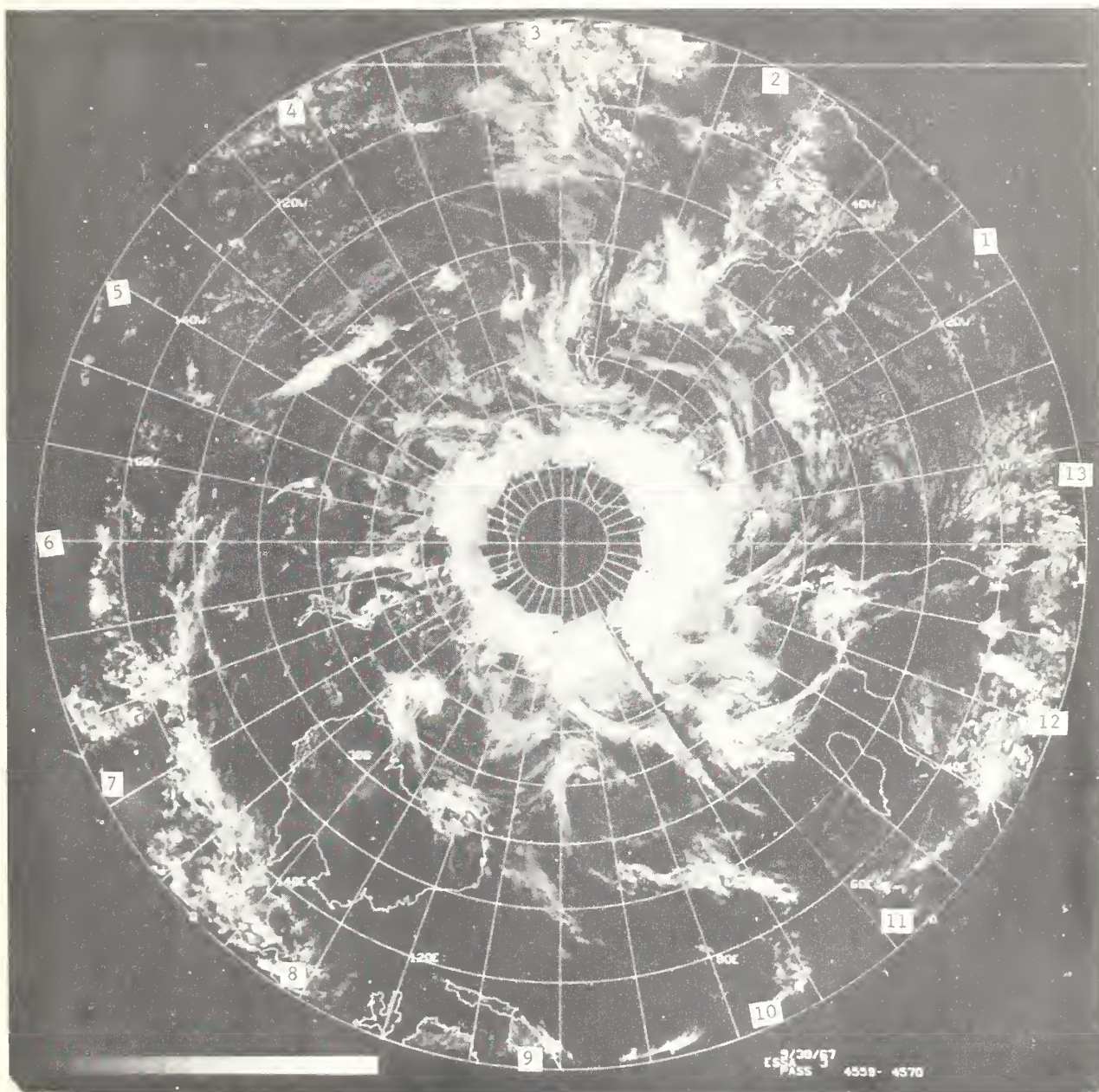












- No. 5.38 "Catalogue of Meteorological Satellite Data - TIROS VIII Television Cloud Photography Part 3 January 1, 1965 to August 31, 1965", published in 1966, price 45 cents.
- No. 5.39 "Catalogue of Meteorological Satellite Data - TIROS IX Television Cloud Photography Part 1 January 22, 1965 to April 30, 1965", published in 1966, price \$1.75.
- No. 5.39 "Catalogue of Meteorological Satellite Data - TIROS IX Television Cloud Photography Part 2 May 1, 1965 to July 26, 1965", published in 1967, price \$1.25.
- No. 5.310 "Catalogue of Meteorological Satellite Data - TIROS X Television Cloud Photography Part 1 July 2, 1965 to September 30, 1965", published in 1967, price \$1.25.
- No. 5.311 "Catalogue of Meteorological Satellite Data - ESSA 1 Television Cloud Photography Part 1 February 3, 1966 to March 31, 1966", published in 1966, price \$1.00.
- No. 5.311 "Catalogue of Meteorological Satellite Data - ESSA 1 Television Cloud Photography Part 2 April 1, 1966 through October 6, 1966", published in 1968, price \$1.75.
- No. 5.313 "Catalog of Meteorological Satellite Data - ESSA 3 Television Cloud Photography Part 1 October 4, 1966 to January 1, 1967", published in 1968, price 75 cents.
- No. 5.313 "Catalog of Meteorological Satellite Data - ESSA 3 Television Cloud Photography Part 2 January 1, 1967 to March 31, 1967", published in 1967, price \$1.50.
- No. 5.314 "Catalog of Meteorological Satellite Data - ESSA 3 and ESSA 5 Television Cloud Photography April 4, 1967 to June 30, 1967", published in 1968, price \$1.75.

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